

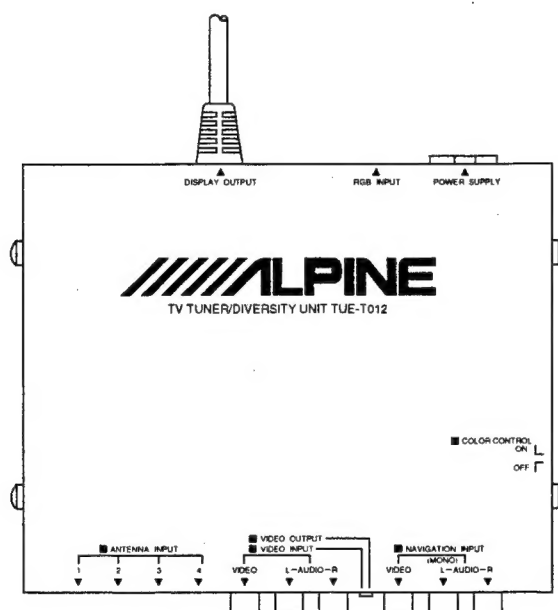
# **////ALPINE**

# **SERVICE MANUAL**

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## **PAL Type TV Tuner**

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# **TUE-T012**

## Contents

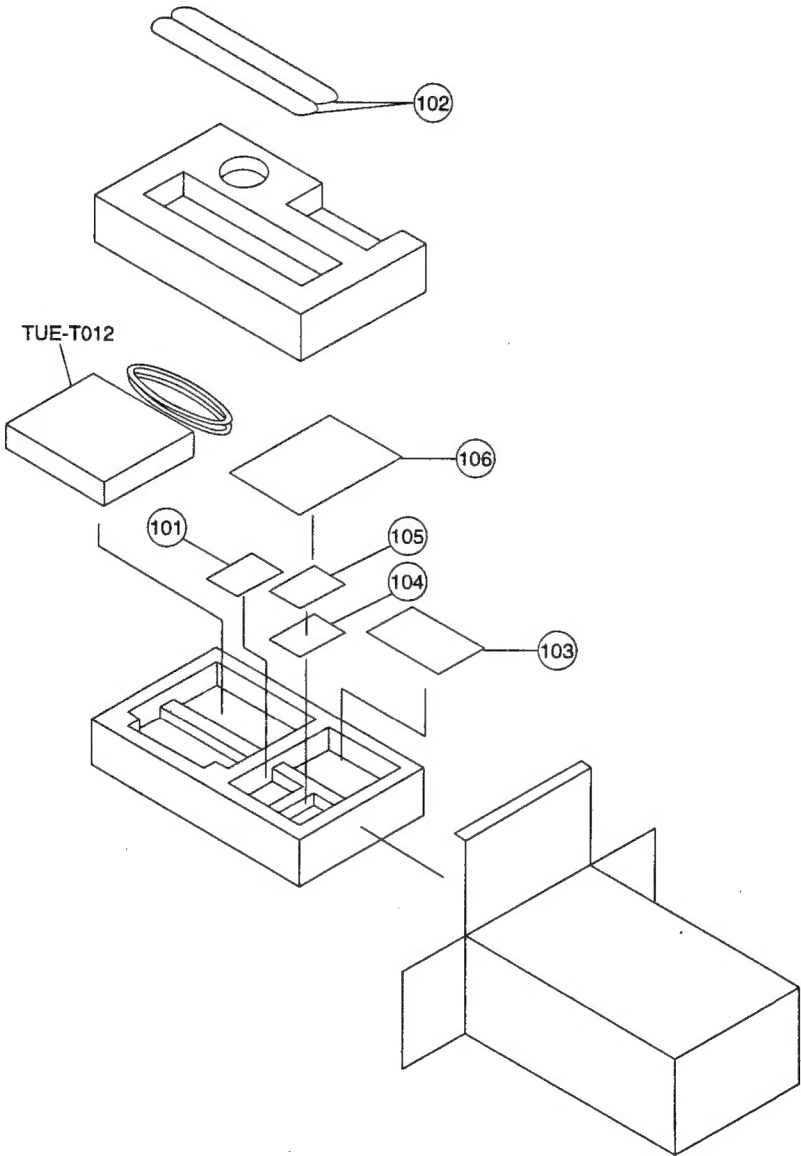
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NOTE : Due to continuing product improvement, specifications and designs are subject to change without notice.

Packing Assembly Parts List

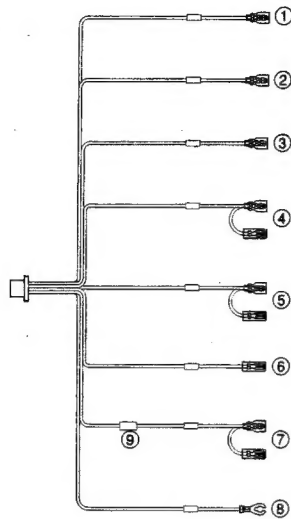
Symbol No.	Part No.	Description	Symbol No.	Part No.	Description
101	01T85359W03	Unit, Remocon RUE4115			
102	01T15381Y01	Antenna, TV			
103	01T25930W13	Assy., Power Wire			
104	55T85423W01	Clip, Remocon			
105	75T85425W01	Pad, Magic Tape			
106	68P91508W82	Owner's Manual			

Packing Method View

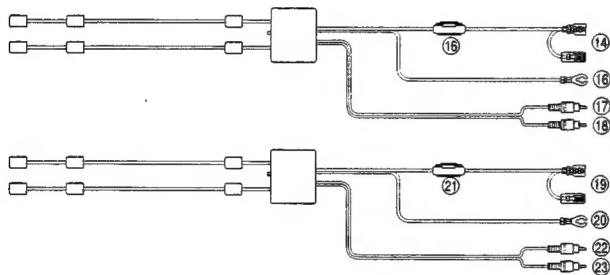


# System Connection

Power Lead Connection

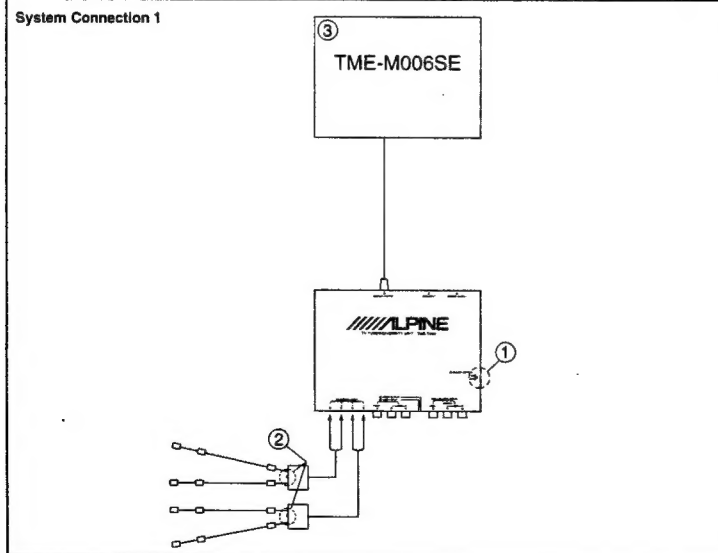


TV Antenna Lead Connection



- ① **Audio Interrupt Lead (Pink/Black)**
- ② **Guide control input lead (White/Green)**  
Connect the lead to the guide control output lead of the ALPINE navigation unit.
- ③ **Display control input lead (Yellow/Red)**  
Connect the lead to the display control input lead of the ALPINE navigation unit.
- ④ **Dimmer input lead (White/Blue)**  
To dimmer lead powered when position lamp switch is on.
- ⑤ **Parking brake lead (Yellow/Blue)**  
Connect this lead to the parking brake lead powered when parking brake is pulled.
- ⑥ **Remote control output lead (White/Brown)**  
To remote control input lead of ALPINE product used in combination.
- ⑦ **ACC power lead (Red)**  
To ACC power lead powered when engine key position is ACC.
- ⑧ ⑮ ⑳ **Ground lead (Black)**  
Connect the lead to a good chassis ground on the vehicle. Make sure the connection is made to bare metal and is securely fastened using the sheet metal screw provided.
- ⑨ ⑬ ㉑ **Fuse**
- ⑩ **Parking brake aux. cord (Yellow/Blue)**
- ⑪ **Parking brake lamp**
- ⑫ **Parking brake signal lead**
- ⑬ **Parking brake switch**
- ⑭ ⑲ **ACC power lead (Red)**  
Connect the lead to ⑦.
- ⑰ ⑱ ㉒ ㉓ **Antenna lead**  
Connect the lead to one of inputs (1 - 4) of the TV Tuner Unit.

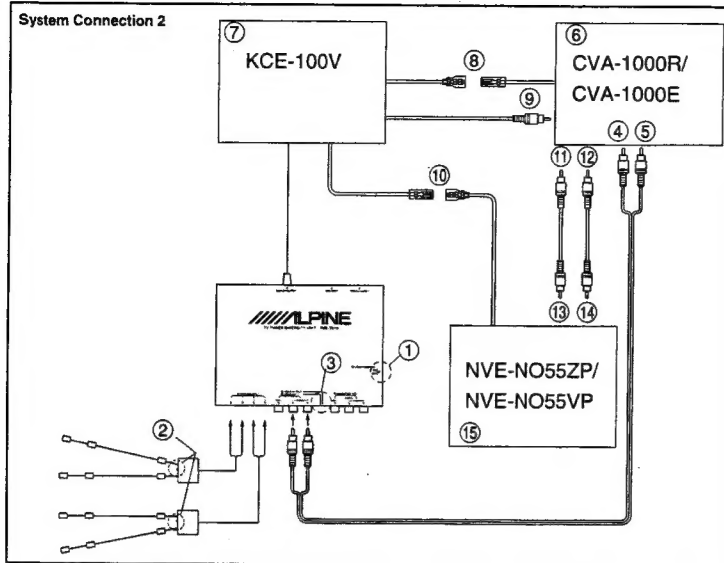
System Connection 1



System Connection 1

- ① **Color Control Switch**  
Set to the ON position.
- ② **TV Antenna Booster Switch**  
Set to the ON position.
- ③ **TV Monitor (optional)**

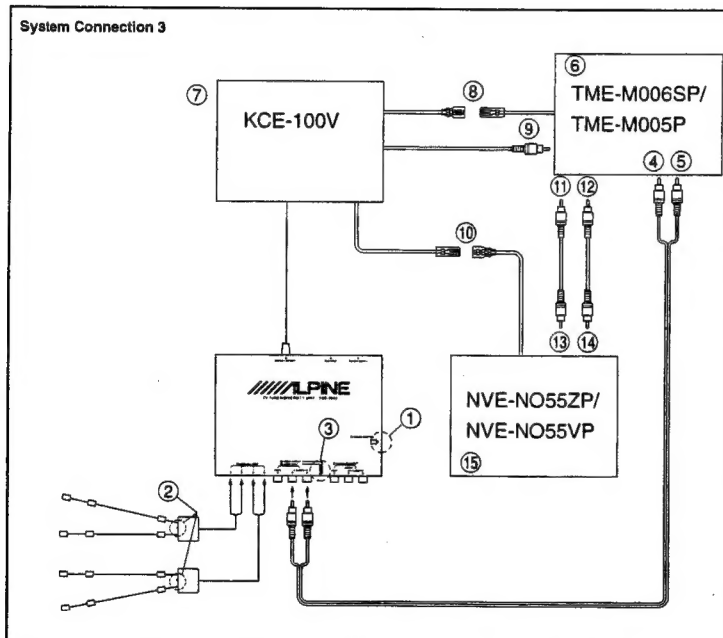
### System Connection 2



### System Connection 2

- ① **Color Control Switch**  
Set to the OFF position.
- ② **TV Antenna Booster Switch**  
Set to the ON position.
- ③ **VIDEO Input/Output Switch**  
Set to the Output position.
- ④⑤ **To Audio Input Terminal (L/R)**
- ⑥ **AV Head Unit (optional)**
- ⑦ **RGB Composite Converter Box (optional)**
- ⑧⑩ **Remote Control Lead**
- ⑨⑫ **To VIDEO Input Terminal**
- ⑪ **To Audio Input Terminal (MONO)**
- ⑬ **To Audio Output**
- ⑭ **To VIDEO Output**
- ⑮ **Navigation (optional)**  
Sold in European market only.

### System Connection 3



### System Connection 3

- ① **Color Control Switch**  
Set to the OFF position.
- ② **TV Antenna Booster Switch**  
Set to the ON position.
- ③ **VIDEO Input/Output Switch**  
Set to the Output position.
- ④ ⑤ **To Audio Input Terminal (L/R)**
- ⑥ **TV Monitor (optional)**
- ⑦ **RGB Composite Converter Box (optional)**
- ⑧ ⑩ **Remote Control Lead**
- ⑨ ⑫ **To VIDEO Input Terminal (L/R)**
- ⑪ **To Audio Input Terminal (MONO)**
- ⑬ **To Audio Output**
- ⑭ **To VIDEO Output**
- ⑮ **Navigation (optional)**  
Sold in European market only.

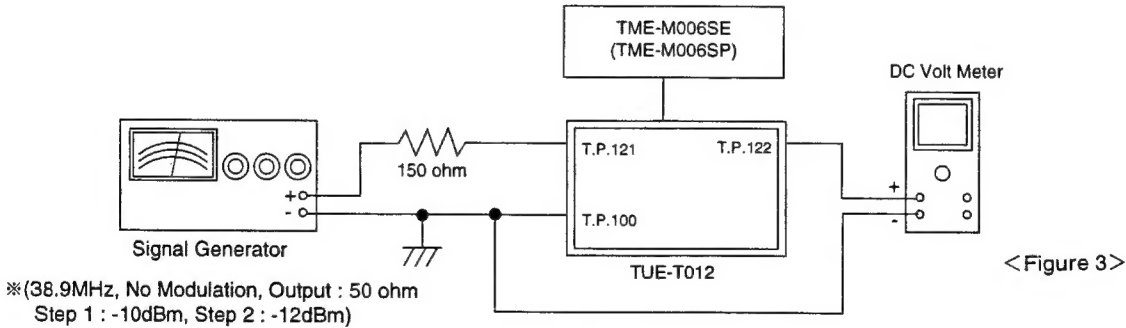
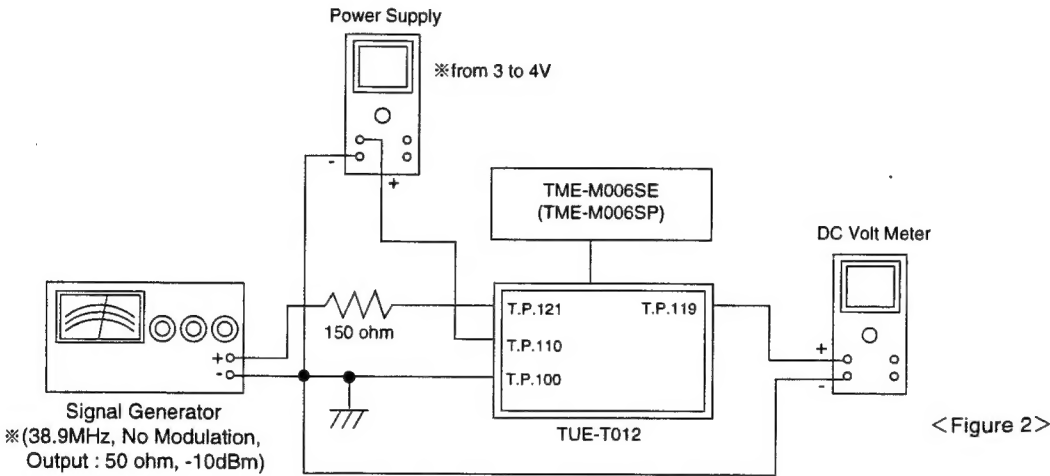
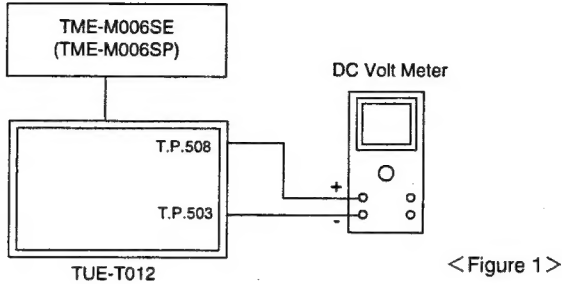
## Specifications

Channel Selection System .....	PLL frequency synthesizer auto tuning system
Color System .....	PAL
Receive Channel .....	VHF : 2 to 13CH UHF : 14 to 69CH
Video Noise Restriction Sensitivity (30dB S/N) .....	VHF : 43dB $\mu$ V UHF : 46dB $\mu$ V
Video S/N Ratio (Input 70dB $\mu$ V, 100Hz to 4.2MHz) .....	VHF, UHF : 37dB
Audio Sensitivity (30dB S/N) .....	VHF, UHF : 25dB $\mu$ V
Audio S/N Ratio (Input 70dB $\mu$ V) .....	VHF, UHF : 40dB
TV Audio Frequency Response (MONO, Ref. 1kHz, Input 70dB $\mu$ V) .....	100Hz : 8dB 400Hz : 1dB 5kHz : 10dB
Distortion (1kHz) .....	3%
Current Consumption .....	TV Mode : 700 to 900mA Stand-by : 55 to 100mA
Power Supply .....	DC14.4V (10 to 16V allowable)
Semiconductors .....	33IC's, 33Transistors, 15Diodes, 11Zener Diodes
Dimension (W×H×D) .....	163×28×120mm
Weight .....	700g

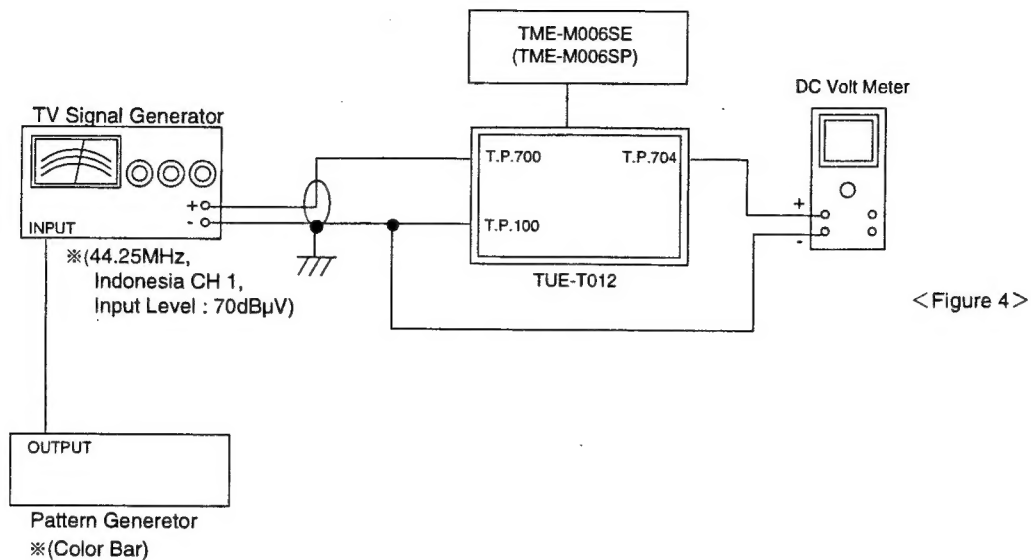
NOTE : Due to continuing product improvement, specifications and designs are subject to change without notice.

# Adjustment Procedures

(1) Connections



TUE-T012



(2) Control Settings

●TUE-T012 .....	●TME-M006SE (TME-M006SP)
VIDEO INPUT/OUTPUT Switch .....	POWER .....
COLOR CONTROL ON/OFF Switch .....	DIMMER Switch .....
OUTPUT	ON
ON	HIGH

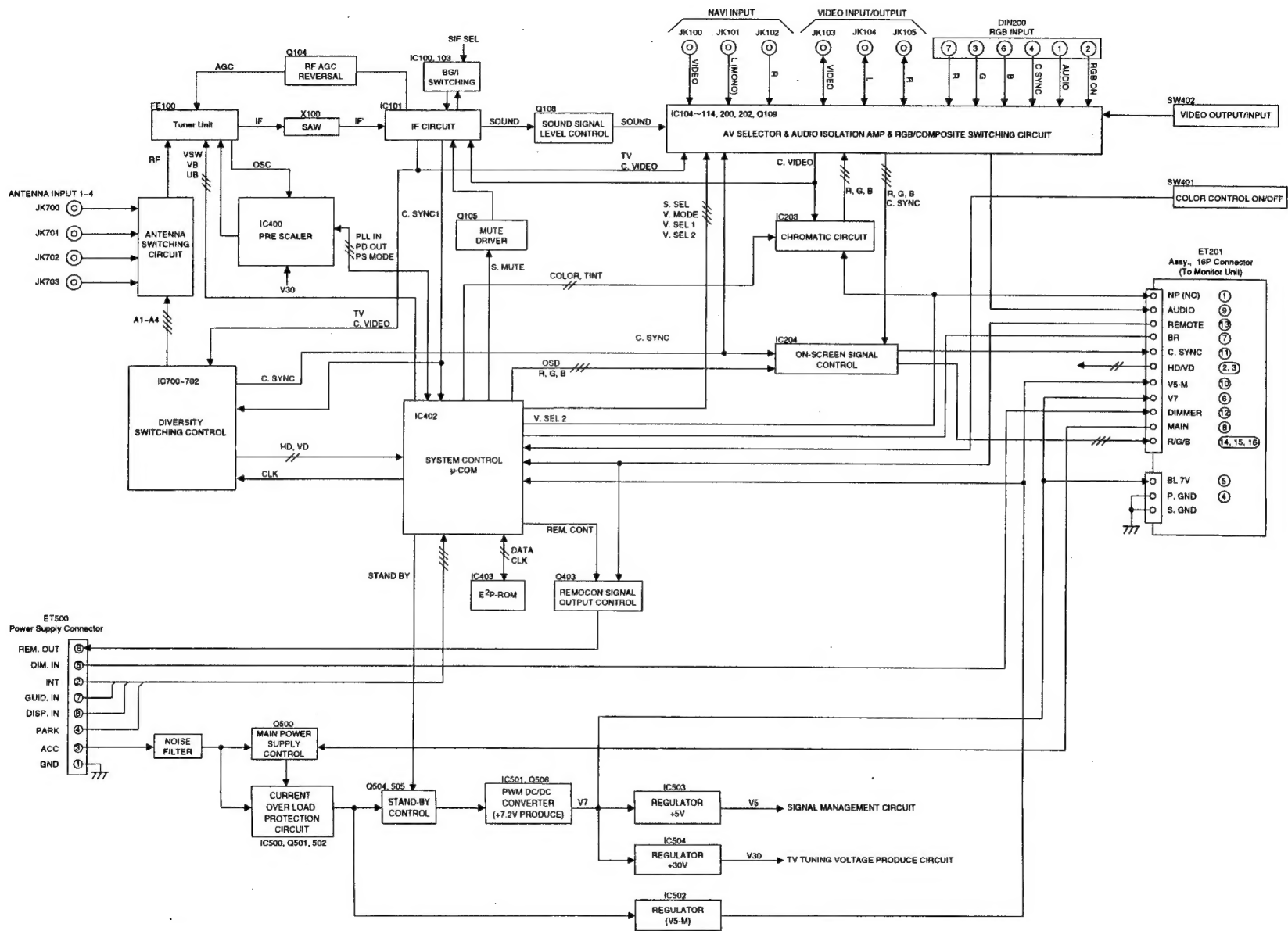


## (3) Adjustment Procedures

Step	Description	Connection		Test Point / P.W.Board Coordinates	Adjustment
1	Power Supply Voltage Adjustment	Figure 1		T.P.508 (3-C) T.P.503 (2-B)	Adjust VR501 to $7.2 \pm 0.1V$ .
2	IF Detection Coil Adjustment	Figure 2		T.P.100 (3-F) T.P.110 (4-F) T.P.119 (3-E) T.P.121 (3-F)	Adjustment T100 to minimum.
3	RF AGC Adjustment	Figure 3	Step 1	T.P.100 (3-F) T.P.121 (3-F)	Adjust VR100 for the point which causes rapid voltage change from $1.4 \pm 0.1V$ to $3.4 \pm 0.3V$ .
			Step 2	T.P.122 (3-E)	Change the Signal Generator from Step 1 to step 2. Check that the DC Volt Meter indicates $1.4 \pm 0.1V$ .
4	PLL Adjustment	Figure 4		T.P.100 (3-F) T.P.700 (5-F) T.P.704 (2-F)	Adjust VR700 to $2.1 \pm 0.1V$ .

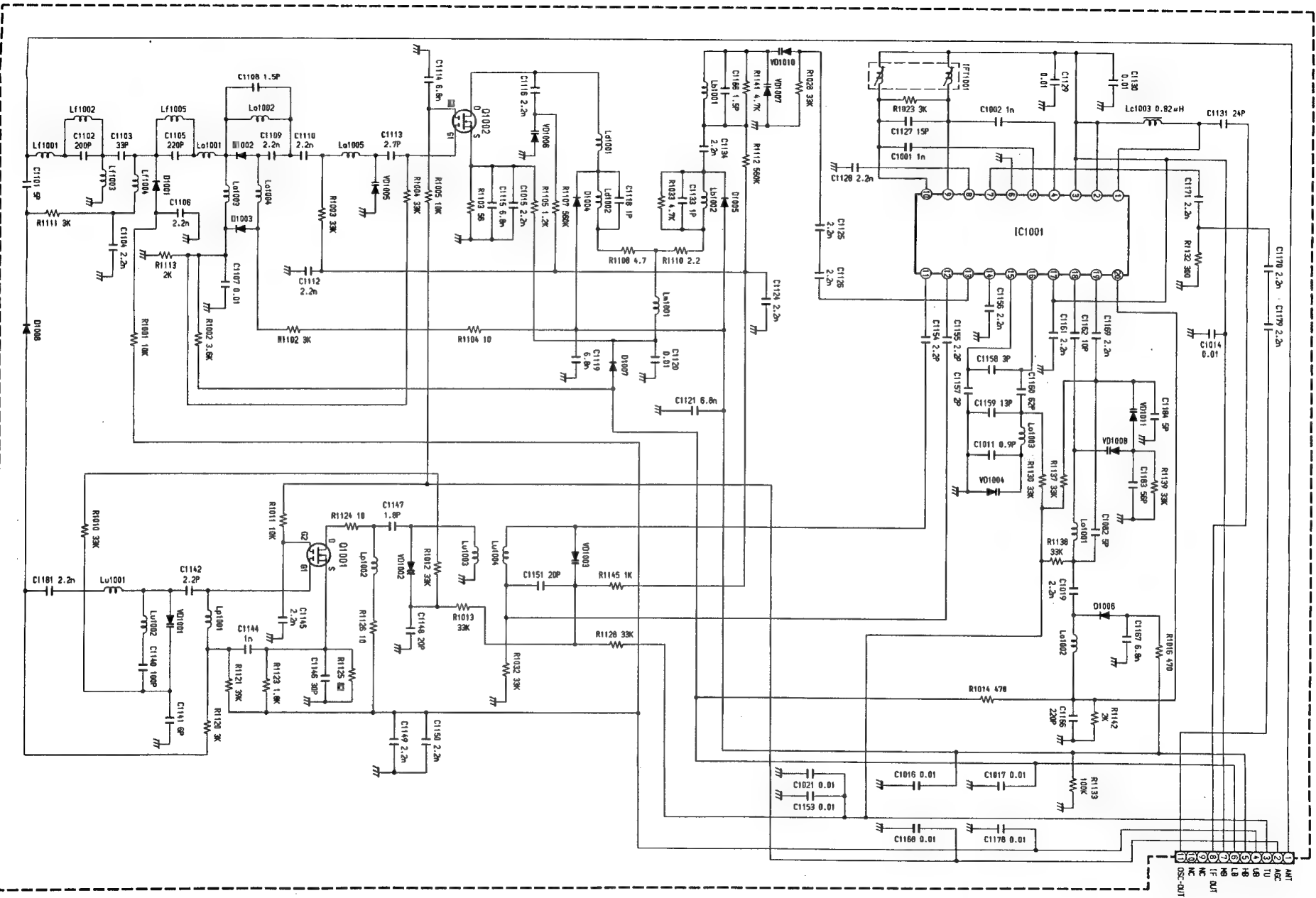
NOTE : For the Adjustment parts and Test Points, refer to the Parts Layout on P.W.Board and Wiring Diagram.

## Block Diagram



# Tuner Schematic Diagram

TUE-T012

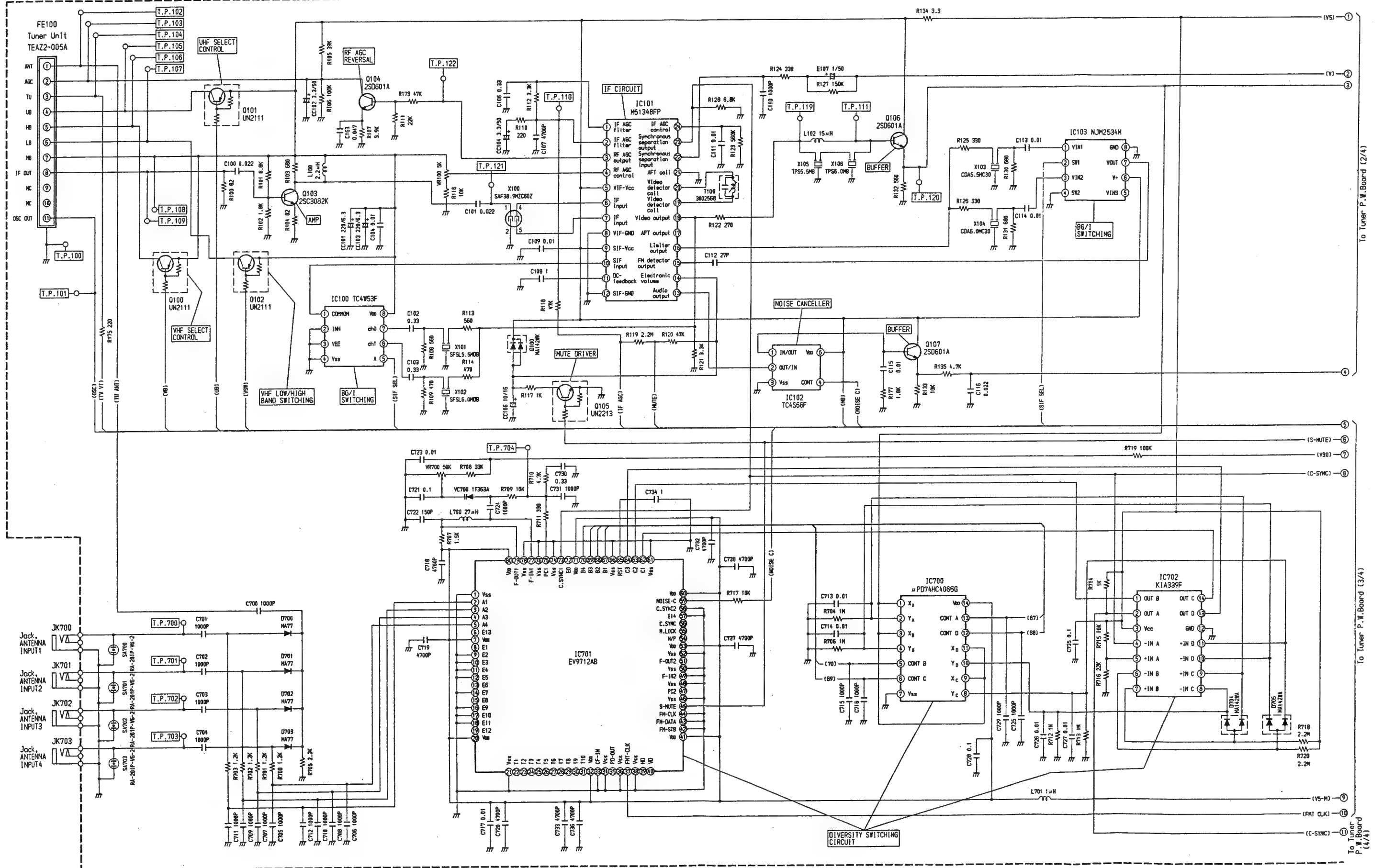


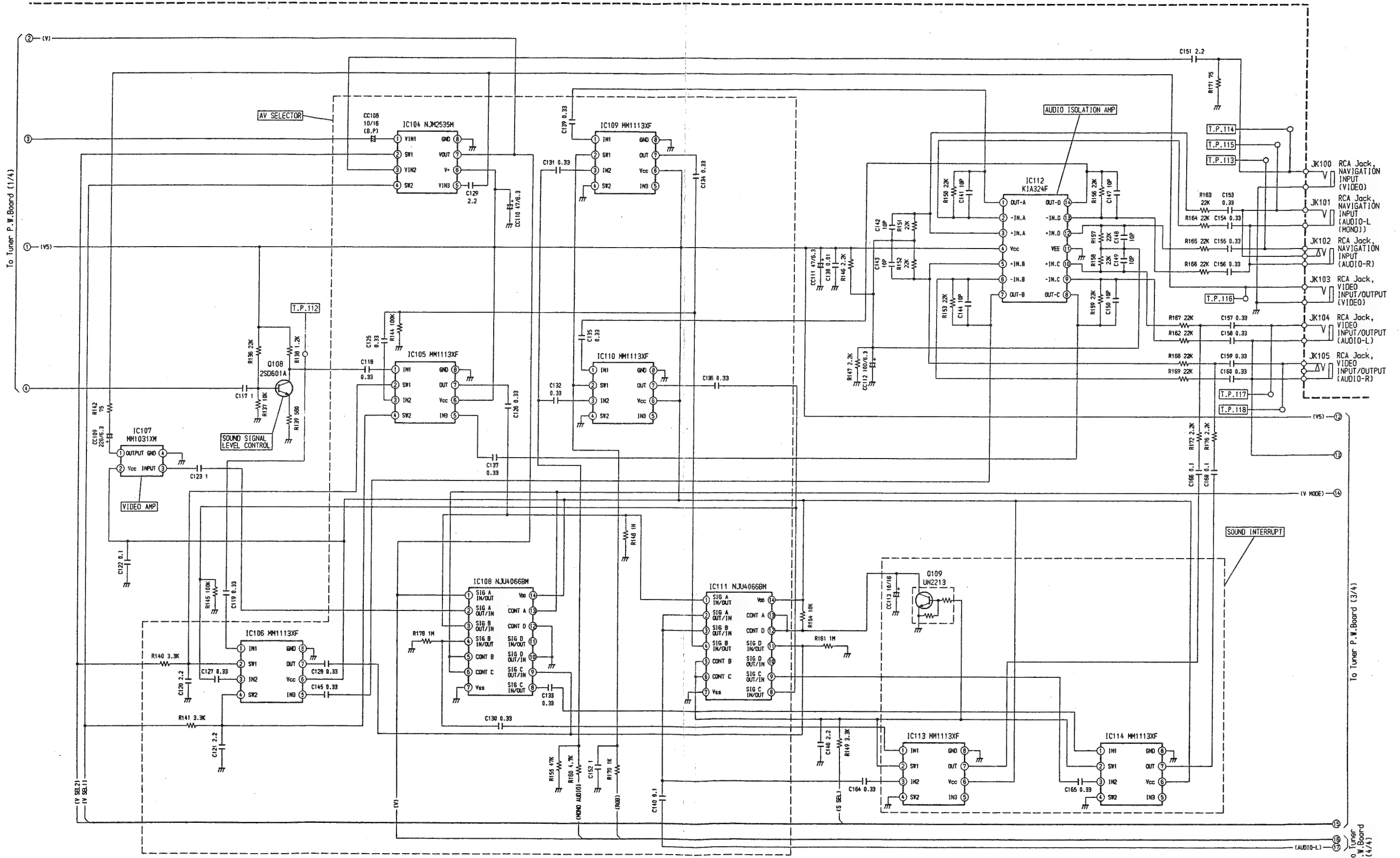
## TUE-T012



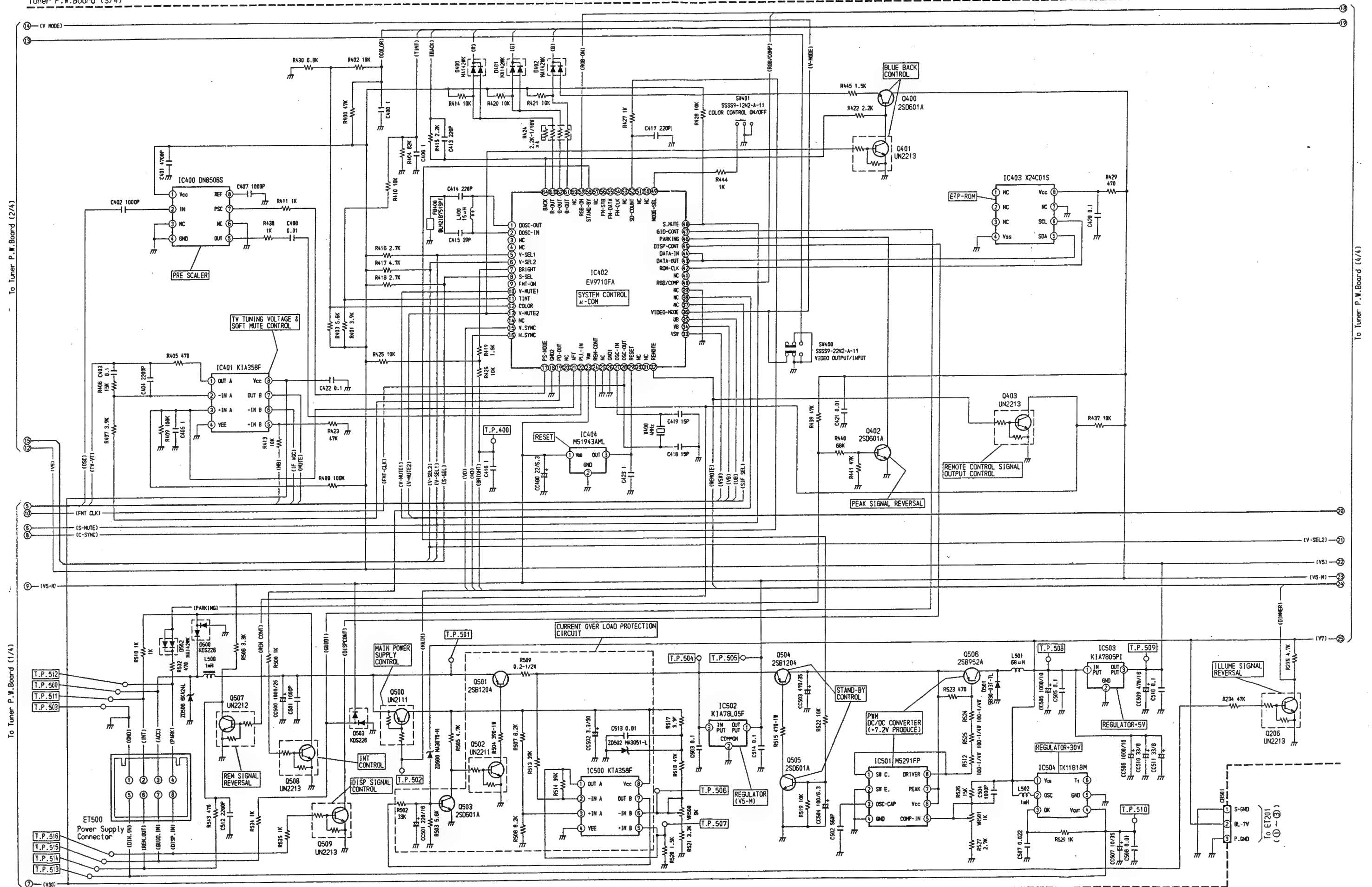
## Schematic Diagram (1/4)

Tuner P.W. Board (1/4)





Tuner P.W. Board (3/4)



To Tuner P.W. Board (2/4)

To Tuner P.W. Board (1/4)

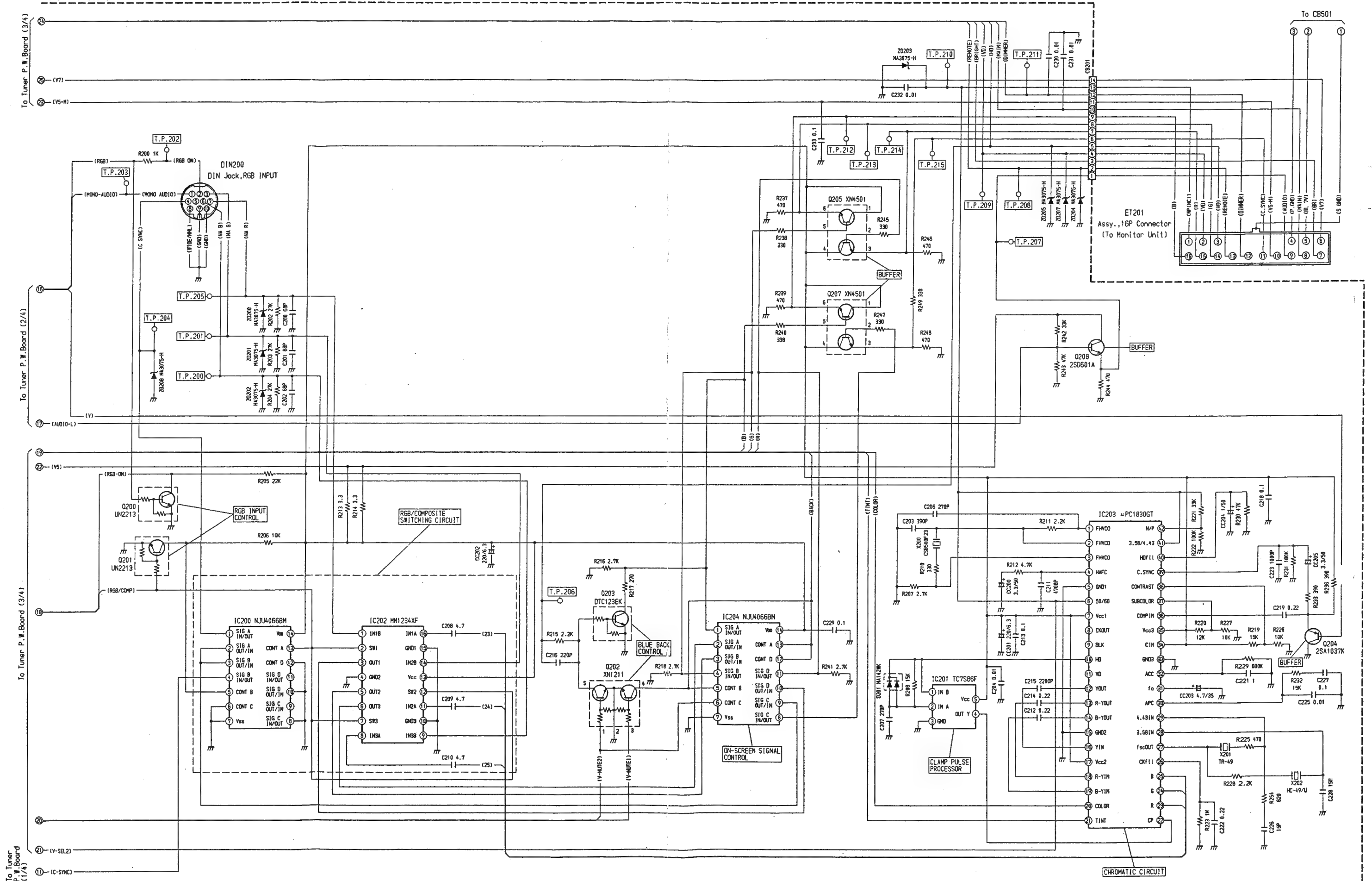
To Tuner P.W. Board (4/4)



# TUE-T012

## Schematic Diagram (4/4)

Tuner P.W.Board (4/4)





# Terminal Voltage of IC/TR and Waveform

IC100

1	1.95V	waveform 1
2-4	0V	
5	0.01V	PAL I (HONG KONG) : 4.92V
6	0V	HONG KONG 21CH : 1.96V, waveform 2
7	1.95V	waveform 3, HONG KONG 21CH : 0V
8	4.75V	

IC101

1	3.84V	waveform 4	14	3.91V	During Mute : 0.13V
2	3.84V		15	2.48V	waveform 7, 8
3	2.33V	waveform 5	16	1.78V	waveform9, 10
4	3.84V		17	NC	
5	4.75V		18	waveform 11	
6, 7	3.82V		19	2.05V	waveform 12
8	0V		20	2.05V	waveform 13
9	4.75V		21	0V	
10	1.95V	waveform 1	22	waveform 14	
11	1.95V		23	waveform 15	
12	0V		24	1.93V	
13	waveform 6	During Mute : 1.68V			

IC102

1	waveform 16
2	waveform 6
3	0V
4	waveform17, 18
5	4.75V

IC103

1	2.36V	waveform 19, 20 PAL I : 2.41V, waveform 21
2	0.01V	PAL I : 4.93V
3	2.4V	waveform 22 PAL I : 2.37V, waveform 23, 24
4	0V	
5	NC	
6	4.75V	
7	1.61V	waveform25, 26 PAL I : 1.61V, waveform27, 28
8	0V	

IC104

1	waveform 29	
2	0.39V	NAVI : 3.31V, VIDEO : 0.38V
3	waveform 30	
4	0.39V	NAVI : 0.19V, VIDEO : 3.8V
5	1.54V	NAVI : 1.54V, VIDEO : 1.48V
6	4.95V	
7	waveform 31	
8	0V	

IC105

1	waveform 32	
2	0.29V	NAVI : 2.46V, VIDEO : 0.28V
3	2.76V	
4	0.14V	NAVI : 0.14V, VIDEO : 2.82V
5	2.76V	
6	4.95V	
7	waveform 33	
8	0V	

IC106

1	waveform 34	
2	0.29V	NAVI : 2.46V, VIDEO : 0.28V
3	2.76V	
4	0.14V	NAVI : 0.14V, VIDEO : 2.82V
5	2.76V	
6	4.95V	
7	waveform 35	
8	0V	

IC107

1	1.13V	VIDEO OUTPUT : waveform 36
2	4.95V	
3	1.9V	VIDEO OUTPUT : waveform 37
4	0V	

IC108

1	waveform 31	
2	0V	VIDEO OUTPUT : waveform 38
3	waveform 39	
4	0V	VIDEO OUTPUT : waveform 40
5, 6	0V	VIDEO OUTPUT : 4.97V
7	0V	
8	0V	VIDEO OUTPUT : waveform 41
9	waveform 42	
10	0V	
11	NC	
12	0V	
13	0V	VIDEO OUTPUT : 4.97V
14	4.95V	

IC109

1	2.76V
2	0.01V
3	2.77V
4	0V
5	NC
6	4.95V
7	2.05V
8	0V

IC110

1	2.75V
2	0.01V
3	2.76V
4	0V
5	NC
6	4.95V
7	2.04V
8	0V

IC111

1	waveform 39	
2	waveform 43	DISP.CONT"H", GUID.CONT"L" : 0V
3	waveform 44	DISP.CONT"H", GUID.CONT"L" : 0V
4	0V	
5, 6	0.13V	DISP.CONT"H", GUID.CONT"L" : 3.44V
7-9	0V	
10	NC	
11	waveform 42	
12, 13	4.94V	DISP.CONT"H", GUID.CONT"L" : 0.04V
14	4.95V	

IC112

1-3	2.47V
4	4.95V
5-14	2.47V

IC113

1	2.75V	VIDEO OUTPUT : waveform 45
2	0.13V	DISP.CONT"H", GUID.CONT"L" : 3.44V
3	waveform 46	DISP.CONT"H", GUID.CONT"L" : 2.75V
4	0V	
5	NC	
6	4.95V	
7	2.02V	VIDEO OUTPUT : waveform 47, DISP.CONT"H", GUID.CONT"L" : 2.02V
8	0V	

IC114

1	2.75V	
2	0.13V	VIDEO OUTPUT : waveform 48
3	2.76V	
4	0V	
5	NC	
6	4.95V	
7	2.03V	VIDEO OUTPUT : waveform 49, DISP.CONT"H", GUID.CONT"L" : 2.02V
8	0V	

IC200

1	0.03V	10	0V
2, 3	waveform 50	11	NC
4	waveform 51	12	0V
5	4.78V	13	0.01V
6-8	0V	14	4.78V
9	NC		

IC203

1	waveform 61	22	waveform 54
2	waveform 62	23	waveform 73
3	waveform 63	24	waveform 74
4	waveform 64	25	waveform 75
5	0V	26	2.67V
6	0.38V	27	waveform 76
7	4.78V	28	1.57V
8	NC	29	waveform 80
9	waveform 65	30	2.37V
10	waveform 52	31	2.48V
11	waveform 66	32	1.15V
12	waveform 67	33	0V
13	waveform 68	34, 35	4.78V
14	waveform 69	36	waveform 83
15	0V	37	2.17V
16	waveform 70	38	1.89V
17	4.78V	39	waveform 84
18	waveform 71	40	3.35V
19	waveform 72	41	0.38V
20	2V	42	0.29V
21	1.94V		

IC201

1	waveform 52
2	waveform 53
3	0V
4	waveform 54
5	4.78V

IC202

1	1.28V	9	1.27V
2	0.01V	10	0V
3	waveform 55	11	waveform 59
4	0V	12	0.01V
5	waveform 56	13	4.78V
6	waveform 57	14	1.28V
7	0.01V	15	0V
8	waveform 58	16	waveform 60

IC204

1	waveform 85	
2	waveform 86	
3	waveform 87	
4	waveform 88	
5	4.06V	CH CALL : waveform 89 Blue Back : 0.02V
6	4.84V	Blue Back : 0.02V
7	0V	
8	waveform 90	
9	waveform 50	
10	waveform 55	
11	waveform 91	
12, 13	4.06V	CH CALL : waveform 89 Blue Back : 0.02V
14	4.78V	

IC400

1	4.95V	
2	2.52V	waveform 92
3, 4	0V	
5	waveform 93	
6	NC	
7	waveform 94, 95	
8	2.51V	

IC401

1	2.78V	69CH : 24.82V
2	2.26V	
3	2.25V	
4	0V	
5	3.91V	During Mute : 3.89V
6	3.91V	During Mute : 4.34V
7	7.4V	During Mute : 0.02V
8	28.27V	

## IC402

1	4.97V	CH CALL : waveform 96, 97	32	waveform 118	Remote Control (TV, NAVI, VIDEO)
2	4.97V	CH CALL : waveform 98, 99	33	0.04V	2-4CH : 0.04V, 5-12CH : 4.71V 21-69CH : 4.73V
3, 4	NC		34	4.74V	3, 4CH : 4.72V, 5-12CH : 0.04V 21-69CH : 4.73V
5	0.19V	NAVI : 0.19V, VIDEO : 3.8V	35	4.74V	3, 4CH : 4.72V, 5-12CH : 4.71V 21-69CH : 0.04V
6	0.39V	NAVI : 3.31V, VIDEO : 0.38V	36	0V	VIDEO OUTPUT : 4.97V
7	waveform 100	BRIGHT MAX (+) : 0.16V MIN (-) : waveform 101	37	0.01V	PAL I (HONG KONG) : 4.92V
8	0.18V	GUID.CONT "L" : 4.86V	38	0.01V	INT OFF, INT ON : 4.95V
9	NC		39	0V	
10	0.02V	Blue Back : 4.86V	40	0.01V	
11	waveform 102	NAVI TINT MAX (+) : 0.43V MIN (-) : waveform 103	41	NC	
12	waveform 104	COLOR MAX (+) : waveform 105 MIN (-) : 0.32V	42	4.98V	TV→NAVI Switching : waveform 119
13	4.84V	Blue Back : 0.02V	43, 44	4.97V	TV→NAVI Switching : waveform 120
14	NC		45	0.01V	DISP.CONT Terminal OPEN : 4.96V
15	waveform 106, 107		46	4.97V	PARK Terminal OPEN : 0.02V
16	waveform 108		47	4.97V	GUID.CONT Terminal GND : 0V
17	waveform 109, 110		48	0.06V	During Mute : 4.2V
18	0V		49	4.96V	COLOR CONTROL ON, OFF : 0.08V
19	waveform 111, 112		50, 51	NC	
20	NC		52	waveform 121	
21	2.25V		53-57	NC	
22	waveform 113		58	4.87V	STAND BY : 0V
23	5V		59	4.86V	
24	waveform 114	Remote Control (TV, NAVI, VIDEO)	60	NC	
25, 26	0V		61	0.1V	MANUAL 2CH CH CALL : waveform 122, 123
27	waveform 115		62	0.1V	MANUAL 2CH CH CALL : waveform 124, 125
28	waveform 116		63	0.1V	MANUAL 2CH CH CALL : waveform 126, 127
29	4.93V	POWER SW OFF→ STAND BY : waveform 117	64	4.06V	MANUAL 2CH CH CALL : waveform 128, 129
30, 31	NC				

## IC500

1	0.2V
2, 3	7.09V
4	0V
5	0.2V
6	0.46V
7	0V
8	14.17V

## IC501

1	waveform 130
2	0V
3	waveform 131
4	0V
5	1.2V
6, 7	13.94V
8	waveform 130

## IC502

1	5V
2	0V
3	14V

## IC503

1	7.28V
2	0V
3	4.96V

## IC504

1	7.28V
2	waveform 157
3	waveform 132
4	28.27V
5	0V
6	NC

## IC403

1-3	NC	
4	0V	
5	4.97V	TV→NAVI Switching : waveform 120
6	4.98V	TV→NAVI Switching : waveform 119
7	0V	
8	4.99V	

## IC700

1	waveform 133	8	waveform 138
2	waveform 134	9	waveform 133
3	waveform 133	10	waveform 139
4	waveform 135	11	waveform 133
5	waveform 136	12	waveform 140
6	waveform 137	13	waveform 141
7	0V	14	4.99V

## IC702

1	waveform 149	8	waveform 139
2	waveform 51	9	waveform 134
3	4.95V	10	waveform 135
4	waveform 15	11	waveform 138
5	3.4V	12	0V
6	waveform 155	13	waveform 150
7	waveform 156	14	waveform 148

## IC404

1	5V	
2	0V	
3	4.93V	POWER SW OFF→STAND BY : waveform 117

# TUE-T012

## IC701

1	0V	35	NC		62	waveform 148	
2	waveform 142	36	0V		63	waveform 149	
3	waveform 143	37	waveform 116		64	waveform 150	
4	waveform 144	38	0V		65	4.97V	POWER SW OFF→ STAND BY : waveform 151
5	waveform 145	39, 40	NC		66	0V	
6	NC	41	4.99V		67	waveform 141	
7	4.99V	42-44	0V		68	waveform 140	
8	NC	45	0.06V	During Mute : 4.2V	69	waveform 137	
9-12	0V	48	0V		70	waveform 136	
13	NC	47	NC		71	4.99V	
14	0V	48-50	0V		72	NC	
15	NC	51	NC		73	waveform 15	
16-18	0V	52	0V		74	0V	
19	NC	53	4.99V		75	waveform 152	
20	4.99V	54-56	NC		76	0V	
21	0V	57, 58	0V		77	waveform 153	
22-31	NC	59	waveform 146, 147		78	0V	
32	4.99V	60	4.99V		79	waveform 154	
33, 34	0V	61	0V		80	4.99V	

## Q100

E	4.75V	
C	0V	2-4CH, 5-12CH : 4.55V, 21-69CH : 0V
B	4.74V	3, 4CH : 4.72V, 5-12CH : 0.04V, 21-69CH : 4.73V

## Q101

E	4.75V	
C	0V	2-4CH, 5-12CH : 0V, 21-69CH : 4.62V
B	4.74V	3, 4CH : 4.72V, 5-12CH : 4.71V, 21-69CH : 0.04V

## Q102

E	4.75V	
C	4.63V	3, 4CH : 4.57V, 5-12CH : 2.74V, 21-69CH : 0.22V
B	0.04V	2-4CH, 5-12CH : 4.71V, 21-69CH : 4.73V

## Q103

E	waveform 158	
C	4.73V	waveform 159
B	0.96V	waveform 160

## Q104

E	waveform 161	
C	1.35V	
B	waveform 162	

## Q105

E	0V	
C	3.89V	During Mute : 0.01V
B	0.06V	During Mute : 4.2V

## Q106

E	waveform 133	
C	4.75V	
B	waveform 163	

## Q107

E	waveform 164	
C	4.75V	
B	waveform 16	

## Q108

E	waveform 165	
C	waveform 166	
B	waveform 167	

## Q109

E	0V	
C	4.94V	DISP.CONT"H", GUID.CONT "L" : 0.04V
B	0.13V	DISP.CONT"H", GUID.CONT "L" : 3.44V

## Q200

E	0V	
C	4.86V	
B	0.01V	

## Q201

E	0V	
C	4.78V	
B	0.01V	

## Q202

1	4.84V	Blue Back : 0.02V
2	0V	
3	0.02V	Blue Back : 4.86V
4	4.06V	Blue Back : 0.02V
5	0.01V	Blue Back : waveform 168

## Q203

E	0V	
C	waveform 169	Blue Back : waveform 170, 171
B	0.01V	Blue Back : waveform 168

## Q204

E	waveform 172	
C	0V	
B	waveform 173	

## Q205

1	4.78V	
2	waveform 174	
3	waveform 175	
4	4.78V	
5	waveform 176	
6	waveform 177	

Q206

E	0V	
C	7.25V	DIMMER Terminal OPEN, DIMMER Terminal "H" : 0.04V DIMMER Terminal OPEN DIMMER SW AUTO : 5.29V
B	0V	DIMMER Terminal OPEN, DIMMER Terminal "H" : 7.56V DIMMER Terminal OPEN DIMMER SW AUTO : 7.58V

Q207

1	4.78V
2	waveform 178
3	waveform 179
4	4.78V
5	waveform 180
6	waveform 181

Q208

E	waveform 182
C	4.95V
B	waveform 183

Q400

E	0.22V	Blue Back : 3.4V
C	5V	
B	0.06V	Blue Back : 4V

Q401

E	0V	
C	0.06V	Blue Back : 4V
B	4.84V	Blue Back : 0.02V

Q402

E	0V	
C	4.97V	PARK Terminal OPEN : 0.02V
B	0.12V	PARK Terminal OPEN : 0.58V

Q403

E	0V	
C	waveform 184	Remote Control (TV, NAVI, VIDEO)
B	waveform 118	Remote Control (TV, NAVI, VIDEO)

Q500

E	14.23V
C	14.17V
B	0.01V

Q501

E	14.23V
C	14.15V
B	13.46V

Q502

E	0V
C	0.11V
B	9.97V

Q503

E	0V
C	9.97V
B	0V

Q504

E	14V
C	13.92V
B	13.27V

Q505

E	0V
C	0.12V
B	0.7V

Q506

E	13.94V
C	waveform 185
B	waveform 186

Q507

E	0V	
C	waveform 187	Remote Control (TV, NAVI, VIDEO)
B	waveform 184	Remote Control (TV, NAVI, VIDEO)

Q508

E	0V	
C	0.31V	INT OFF, INT ON : 0V
B	0.01V	INT OFF, INT ON : 4.86V

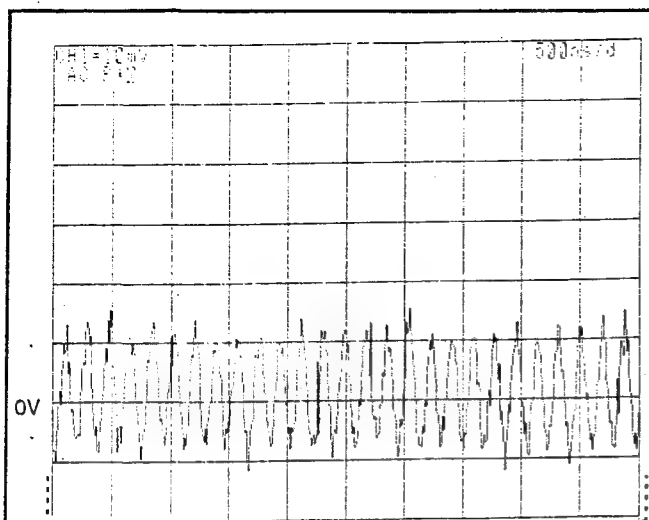
Q509

E	0V	
C	0.01V	DISP. CONT OPEN : 4.97V
B	4.91V	DISP. CONT OPEN : 0V

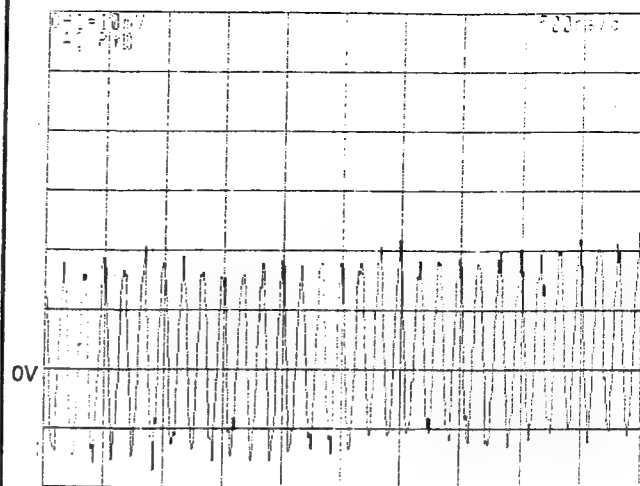
T.P.100	0V		T.P.208	waveform 118	Remote Control (TV, NAVI, VIDEO)
T.P.101	waveform 188		T.P.209	waveform 106, 107	
T.P.102	waveform 189		T.P.210	0.38V	NAVI : 3.32V, VIDEO : 0.38V
T.P.103	1.35V		T.P.211	7.25V	DIMMER Terminal OPEN, DIMMER Terminal "H" : 0.04V, DIMMER Terminal OPEN, DIMMER SW AUTO : 5.29V
T.P.104	2.78V	69CH : 24.81V	T.P.212	waveform 181	
T.P.105	0V	2-4CH, 5-12CH : 0V, 21-69CH : 4.62V	T.P.213	waveform 177	
T.P.106	0V	2-4CH, 5-12CH : 4.55V, 21-69CH : 0V	T.P.214	waveform 175	
T.P.107	4.63V	3, 4CH : 4.57V, 5-12CH : 2.74V, 21-69CH : 0.22V	T.P.215	waveform 198	
T.P.108	4.75V		T.P.400	2.19V	BRIGHT MAX (+) : 0.78V, MIN (-) : 4.72V
T.P.109	waveform 190		T.P.500	14.4V	
T.P.110	3.84V		T.P.501	14.23V	
T.P.111	waveform 183		T.P.502	0.01V	
T.P.112	waveform 166		T.P.503	0V	
T.P.113	0V		T.P.504	14V	
T.P.114	waveform 191		T.P.505	5V	
T.P.115	0V		T.P.506	0.46V	
T.P.116	waveform 192	VIDEO OUTPUT	T.P.507	0.2V	
T.P.117	waveform 193	VIDEO OUTPUT	T.P.508	7.28V	
T.P.118	waveform 194		T.P.509	4.96V	
T.P.119	waveform 195		T.P.510	28.27V	
T.P.120	waveform 133		T.P.511	0.3V	INT OFF, INT ON : 0V
T.P.121	waveform 196, 197		T.P.512	0V	
T.P.122	2.33V	waveform 5	T.P.513	14.4V	
T.P.200	1.27V		T.P.514	waveform 199	Remote Control (TV, NAVI, VIDEO)
T.P.201	1.28V		T.P.515	0V	GUID.CONT Terminal "L"
T.P.202	0.01V		T.P.516	5V	
T.P.203	0V		T.P.700	waveform 200	
T.P.204	0.03V		T.P.701	0V	
T.P.205	1.28V		T.P.702	0V	
T.P.206	waveform 108		T.P.703	0V	
T.P.207	waveform 182		T.P.704	2.04V	waveform 201

## [Measuring Conditions]

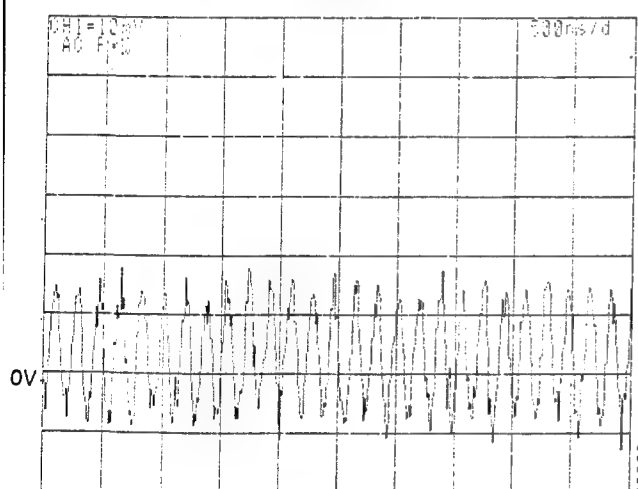
- Power Supply Voltage : DC14.4V
- Measuring Meter : Digital Multi Voltmeter
- Measuring Point Reference : Between Ground
- Measuring Conditions : Monitor Unit Connection
  - TV Channel Mode : GERMANY
  - RF Input : 2CH (fp=48.25MHz), ANT 1 Connection VIDEO : Color Bar (PAL)
  - NAVI Input : VIDEO : Color Bar (NTSC)
  - VIDEO Input : No signal
  - DISP. CONT IN Terminal : "H"
  - PARKING IN Terminal : GND
  - GUIDE CONT IN Terminal : OPEN
  - DIMMER IN Terminal : OPEN
  - DIMMER SW : High
  - COLOR CONTROL SW : ON
  - VIDEO INPUT/OUTPUT SW : INPUT
  - SCREEN OUTPUT : TV Mode
  - SCREEN Adjustment : BRIGHT, COLOR, TINT : CENTER



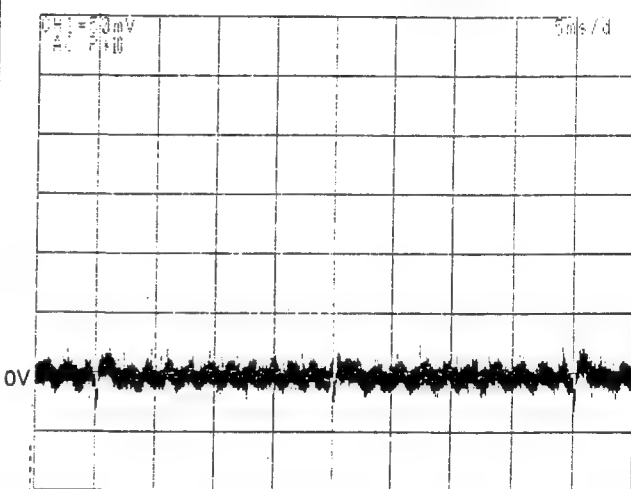
No. 1  
DC · AC  
Volt/Div= 10m V/Div  
Time/Div= 500n S/Div



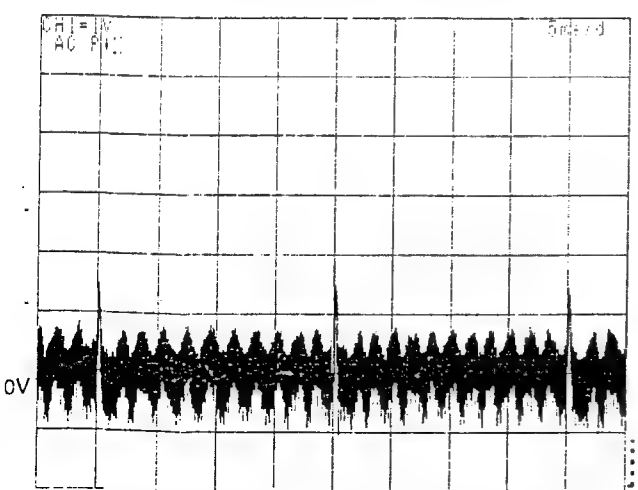
No. 2  
DC · AC  
Volt/Div= 10m V/Div  
Time/Div= 500n S/Div



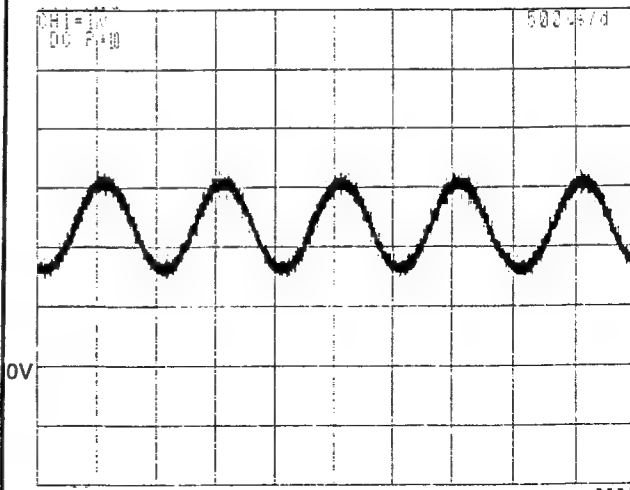
No. 3  
DC · AC  
Volt/Div= 10m V/Div  
Time/Div= 500n S/Div



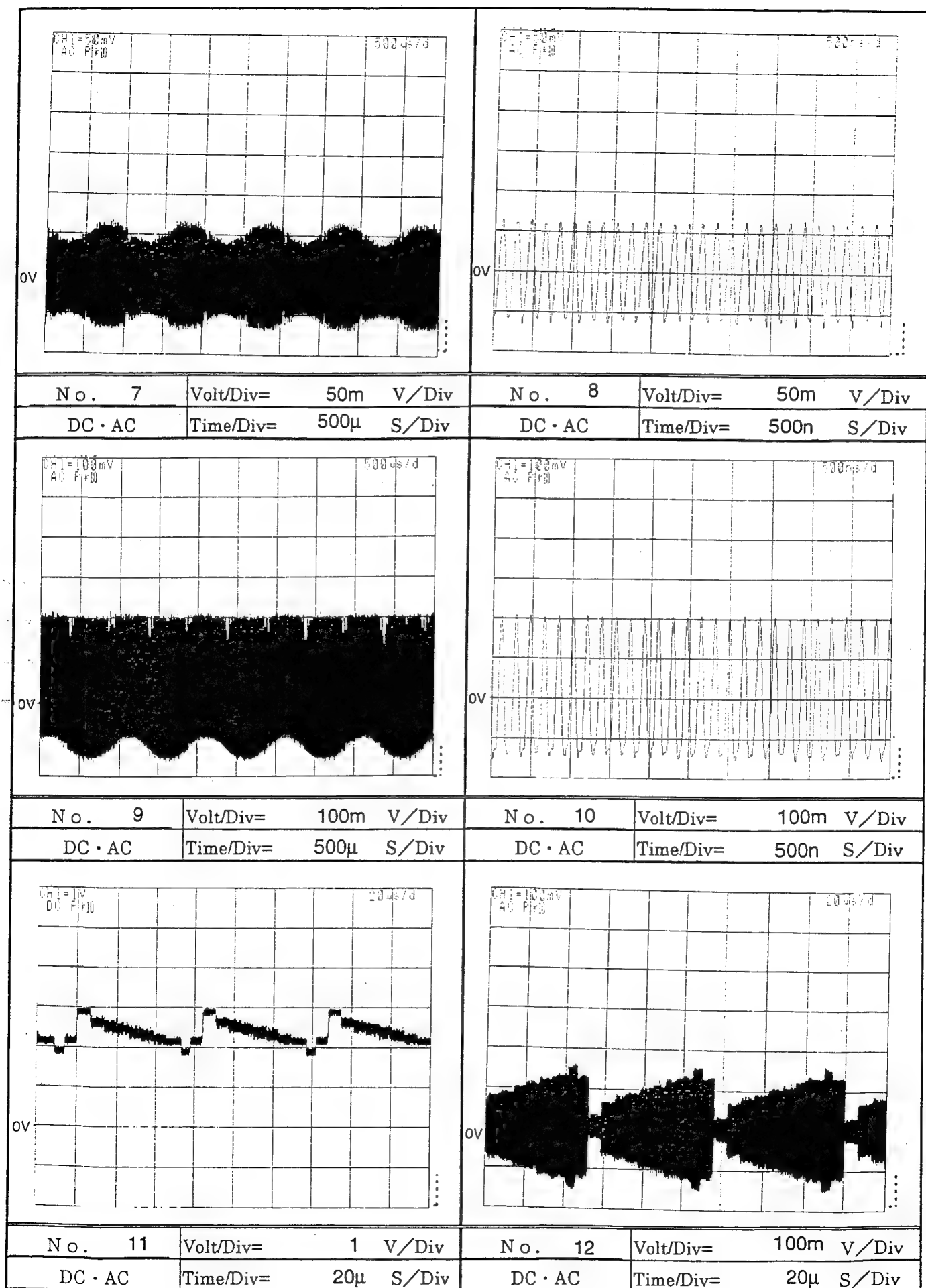
No. 4  
DC · AC  
Volt/Div= 50m V/Div  
Time/Div= 5m S/Div



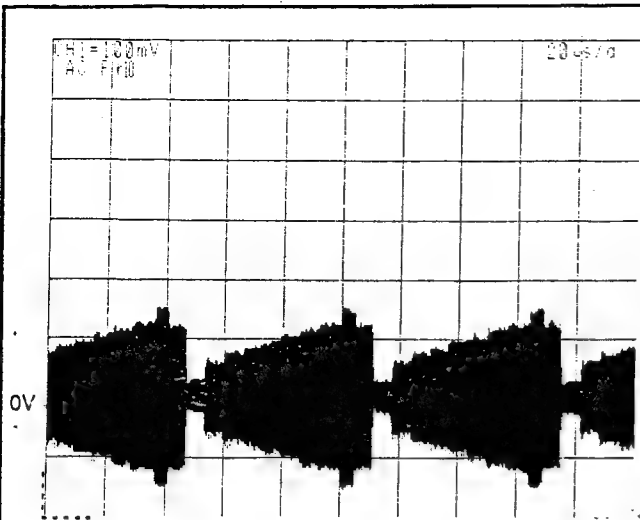
No. 5  
DC · AC  
Volt/Div= 1 V/Div  
Time/Div= 5m S/Div



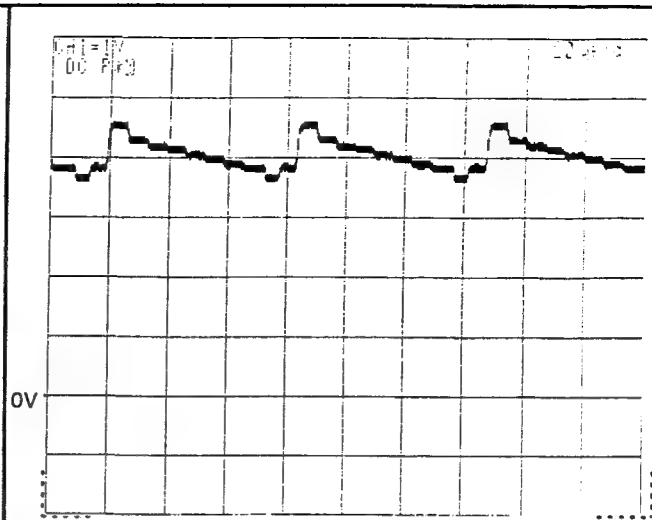
No. 6  
DC · AC  
Volt/Div= 1 V/Div  
Time/Div= 500μ S/Div



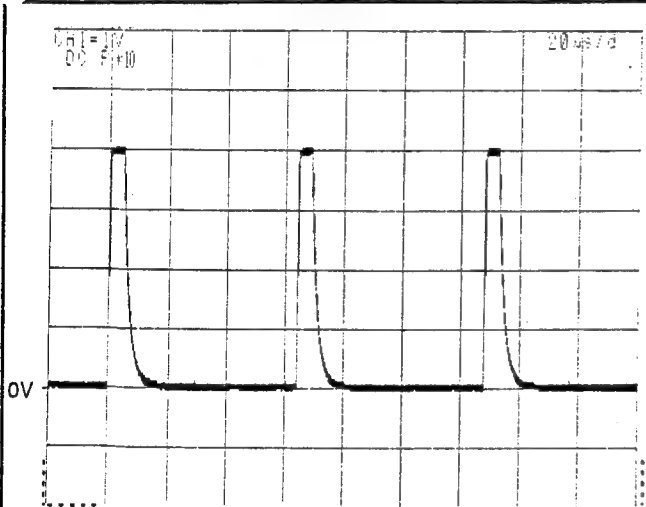




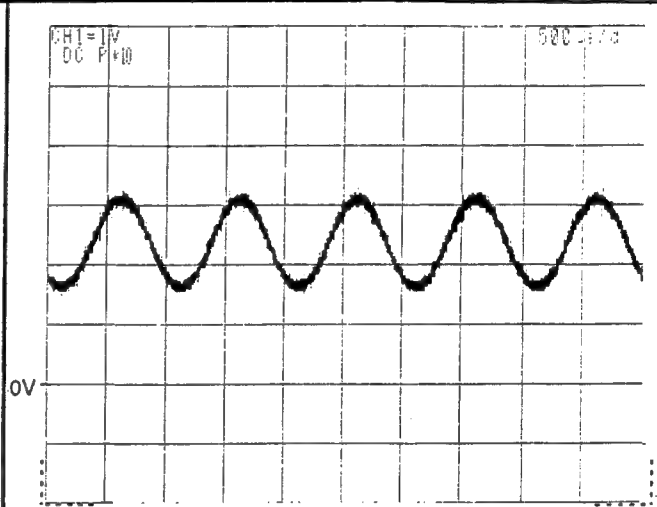
No. 13 Volt/Div= 100m V/Div  
DC · AC Time/Div= 20μ S/Div



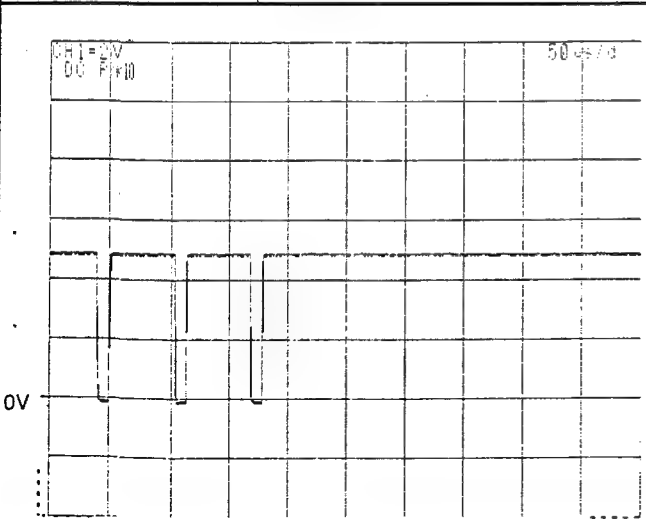
No. 14 Volt/Div= 1 V/Div  
DC · AC Time/Div= 20μ S/Div



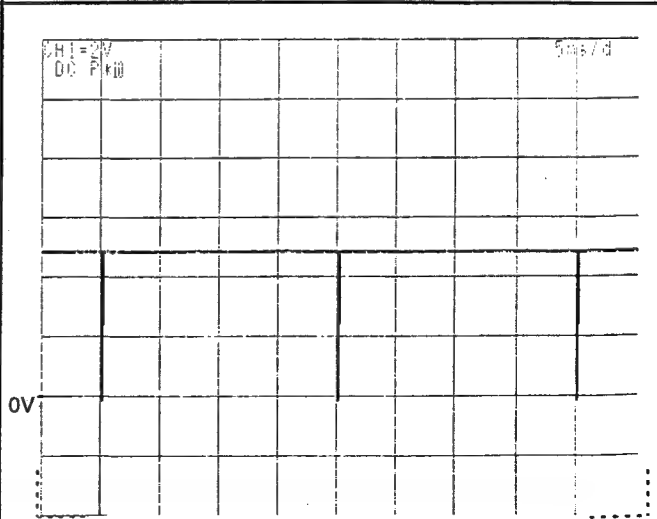
No. 15 Volt/Div= 1 V/Div  
DC · AC Time/Div= 20μ S/Div



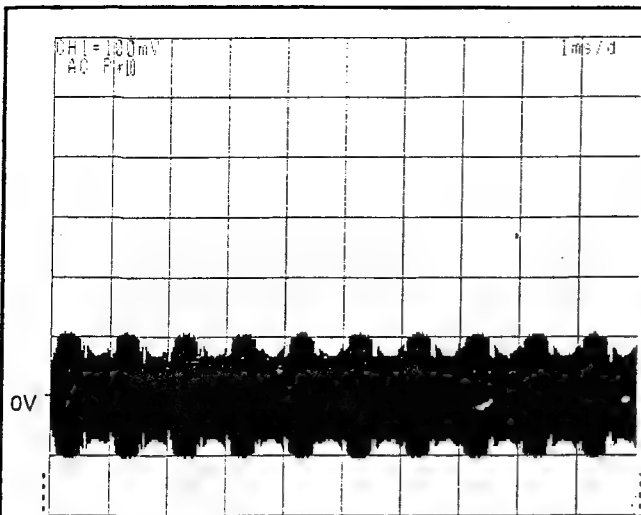
No. 16 Volt/Div= 1 V/Div  
DC · AC Time/Div= 500μ S/Div



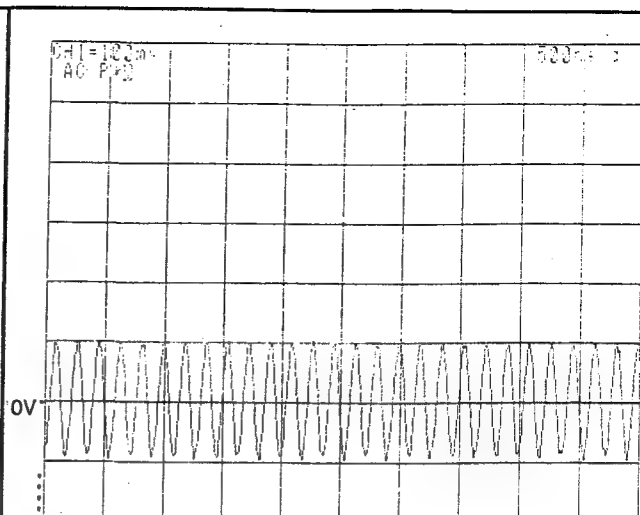
No. 17 Volt/Div= 2 V/Div  
DC · AC Time/Div= 50μ S/Div



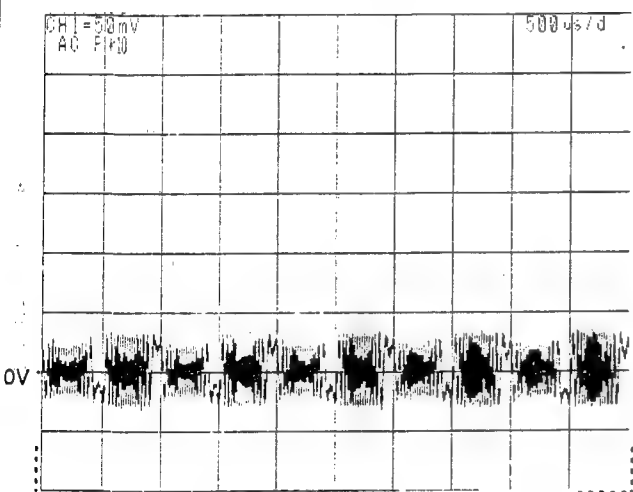
No. 18 Volt/Div= 2 V/Div  
DC · AC Time/Div= 5m S/Div



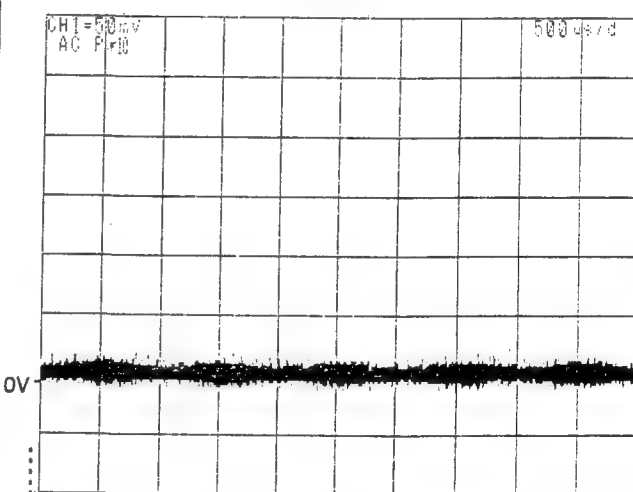
No. 19 Volt/Div= 100m V/Div  
DC · AC Time/Div= 1m S/Div



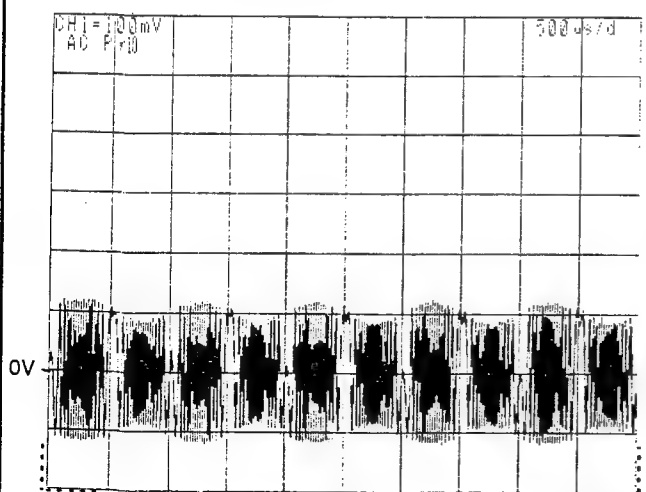
No. 20 Volt/Div= 100m V/Div  
DC · AC Time/Div= 500n S/Div



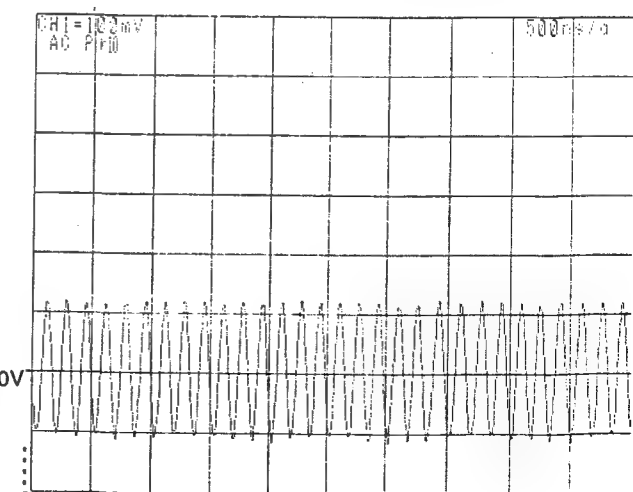
No. 21 Volt/Div= 50m V/Div  
DC · AC Time/Div= 500μ S/Div



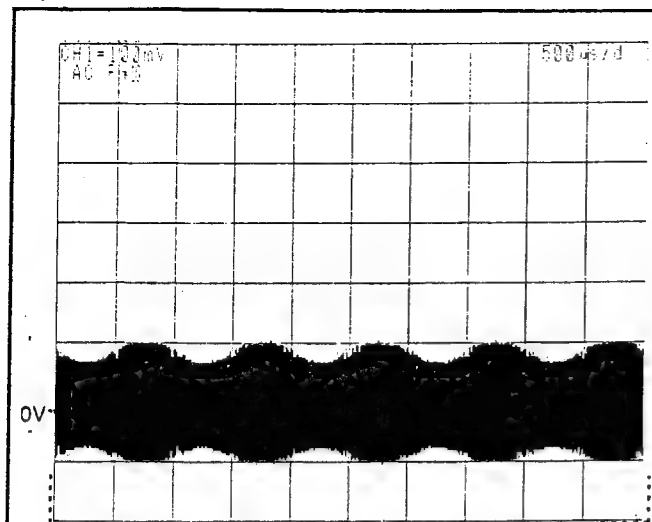
No. 22 Volt/Div= 50m V/Div  
DC · AC Time/Div= 500μ S/Div



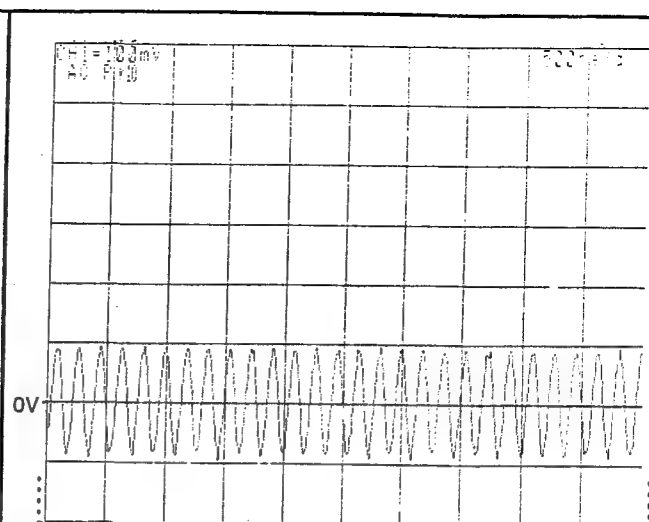
No. 23 Volt/Div= 100m V/Div  
DC · AC Time/Div= 500μ S/Div



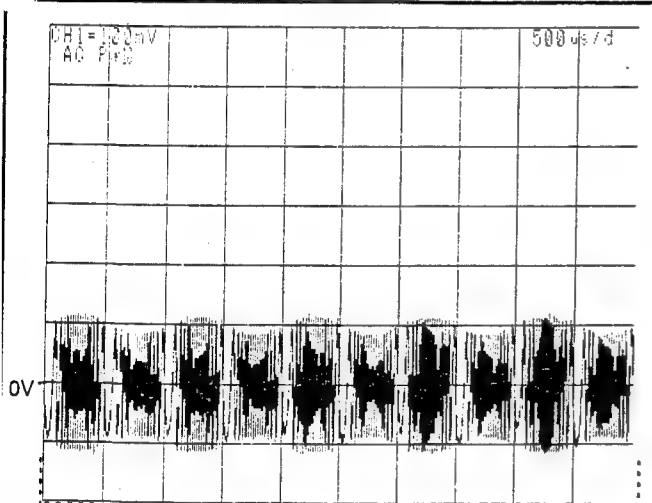
No. 24 Volt/Div= 100m V/Div  
DC · AC Time/Div= 500n S/Div



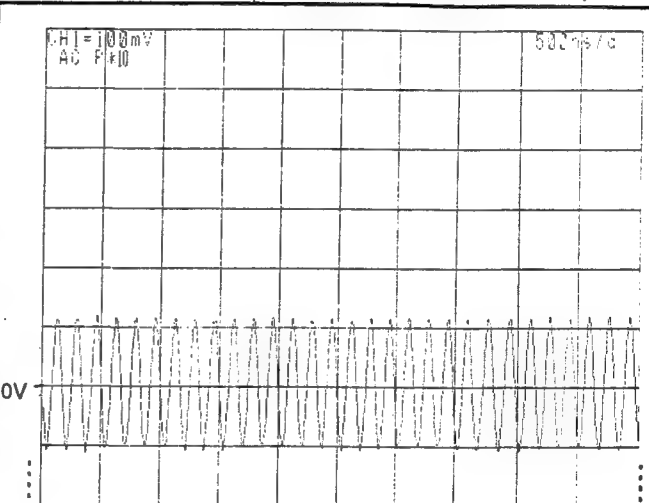
No. 25 Volt/Div= 100m V/Div  
DC · AC Time/Div= 500μ S/Div



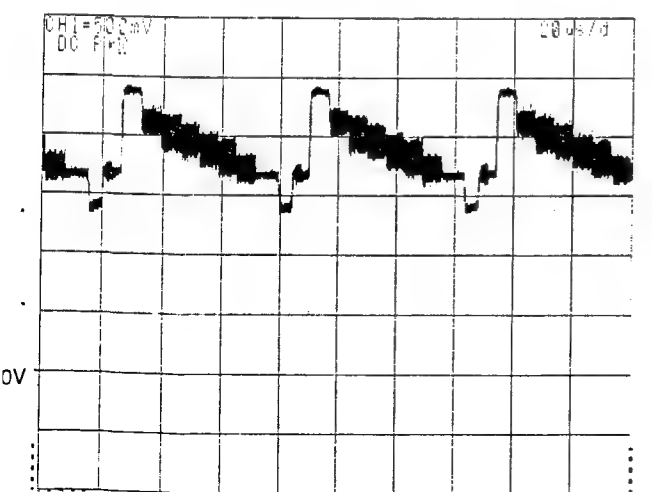
No. 26 Volt/Div= 100m V/Div  
DC · AC Time/Div= 500n S/Div



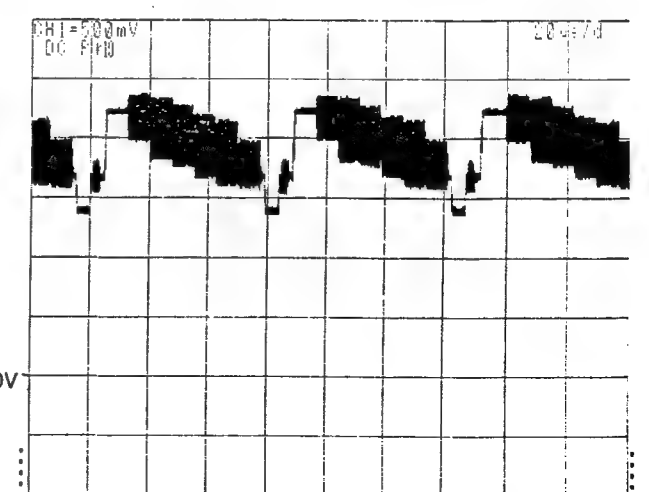
No. 27 Volt/Div= 100m V/Div  
DC · AC Time/Div= 500μ S/Div



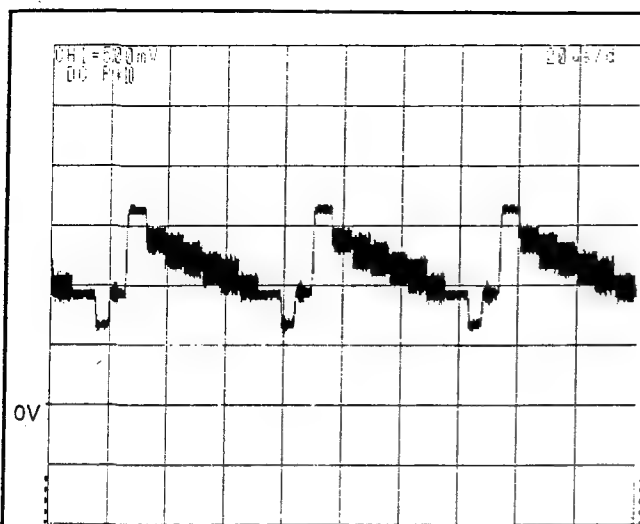
No. 28 Volt/Div= 100m V/Div  
DC · AC Time/Div= 500n S/Div



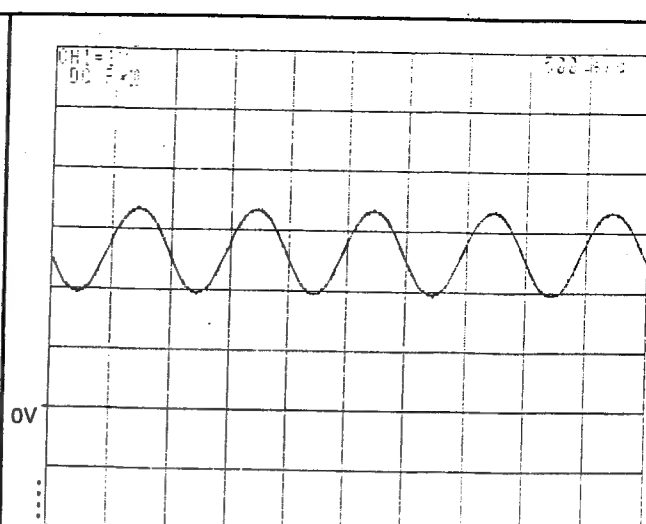
No. 29 Volt/Div= 500m V/Div  
DC · AC Time/Div= 20μ S/Div



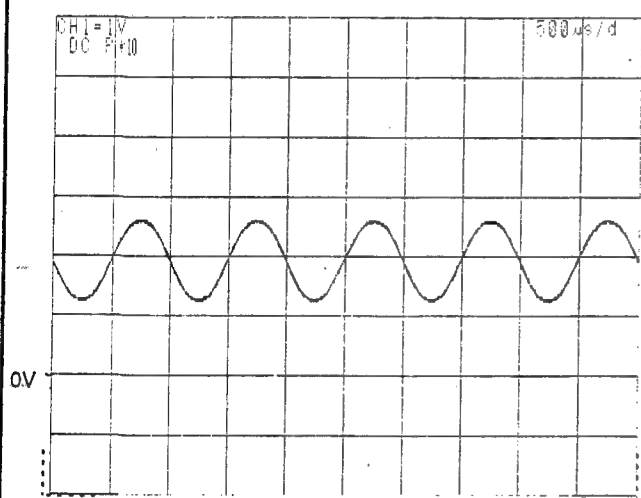
No. 30 Volt/Div= 500m V/Div  
DC · AC Time/Div= 20μ S/Div



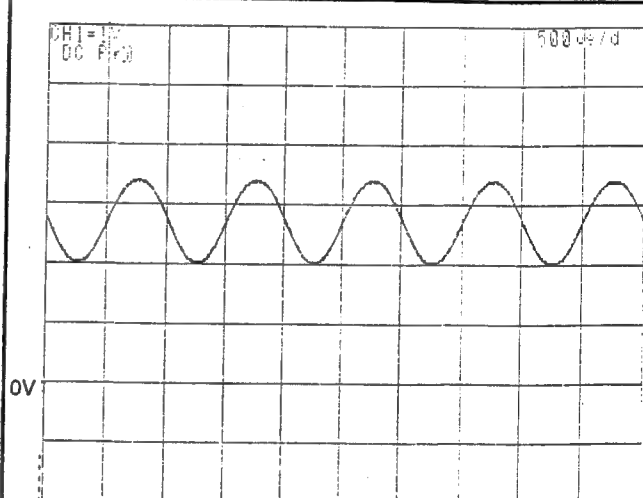
No. 31 Volt/Div= 500m V/Div  
DC · AC Time/Div= 20μ S/Div



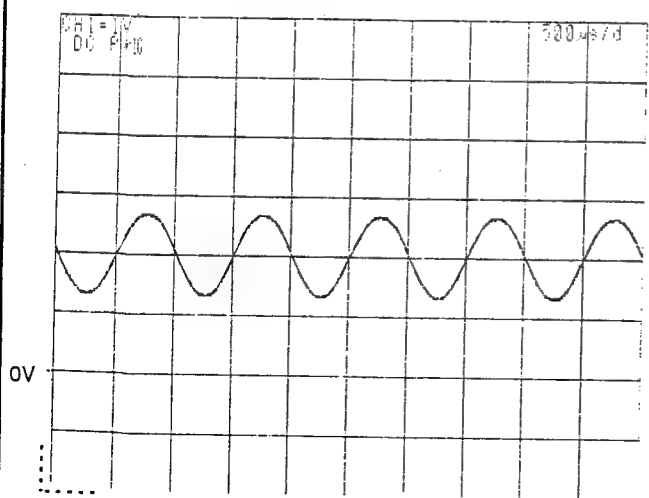
No. 32 Volt/Div= 1 V/Div  
DC · AC Time/Div= 500μ S/Div



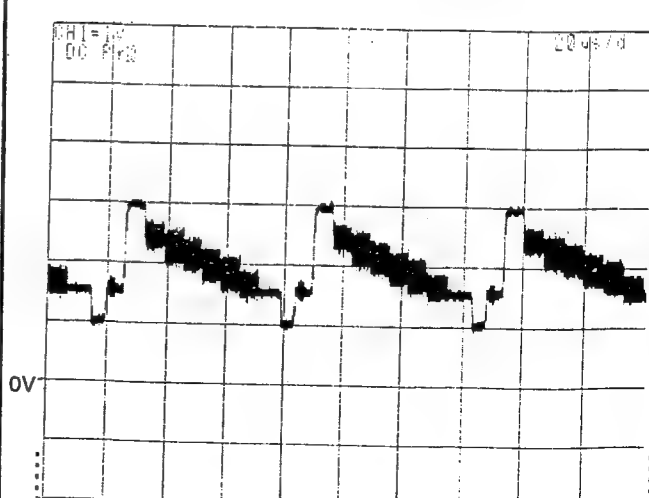
No. 33 Volt/Div= 1 V/Div  
DC · AC Time/Div= 500μ S/Div



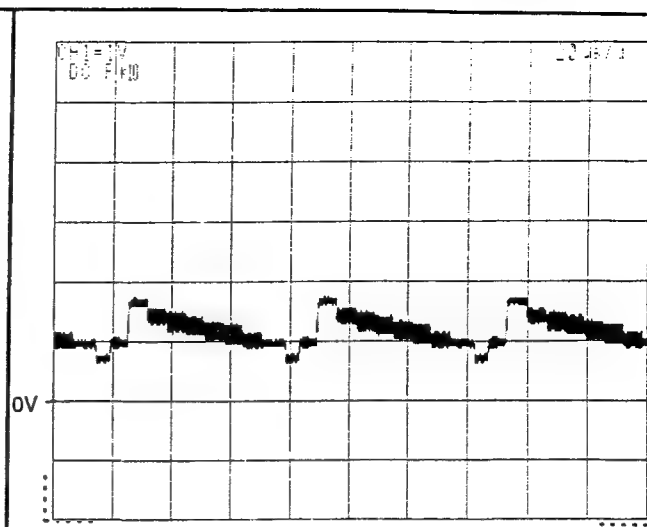
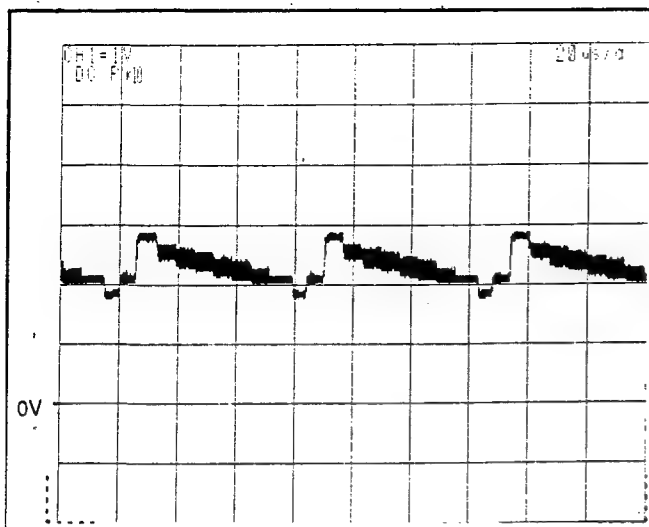
No. 34 Volt/Div= 1 V/Div  
DC · AC Time/Div= 500μ S/Div



No. 35 Volt/Div= 1 V/Div  
DC · AC Time/Div= 500μ S/Div

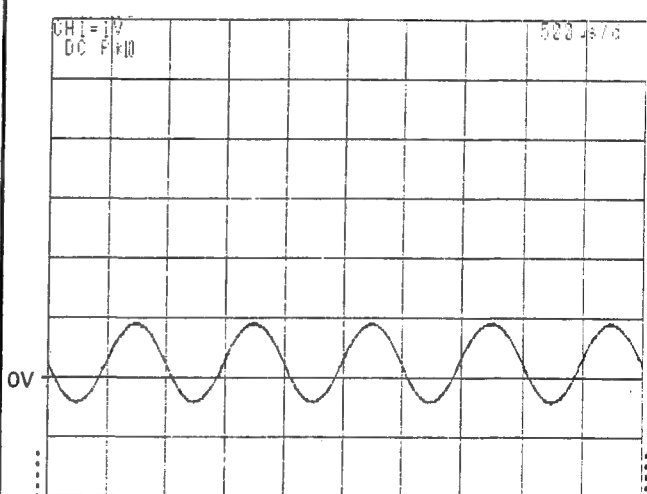
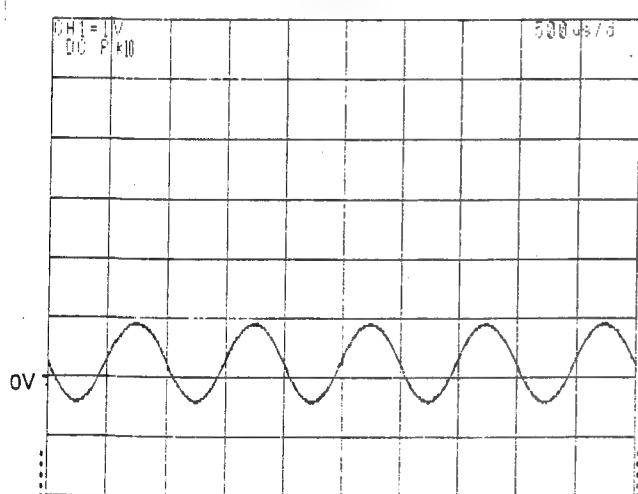


No. 36 Volt/Div= 1 V/Div  
DC · AC Time/Div= 20μ S/Div



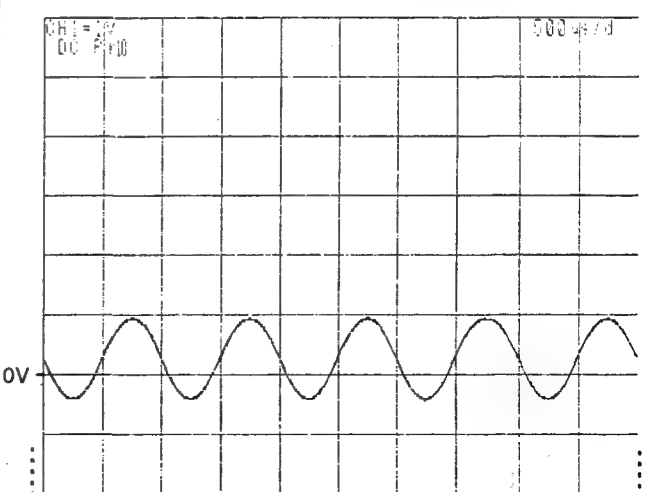
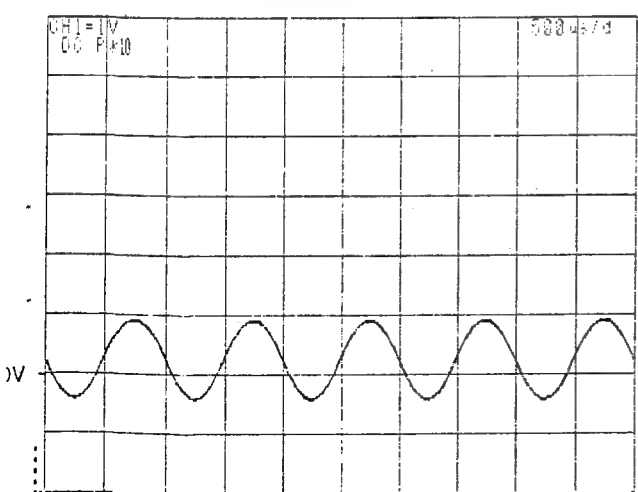
No. 37 Volt/Div= 1 V/Div  
DC · AC Time/Div= 20μ S/Div

No. 38 Volt/Div= 1 V/Div  
DC · AC Time/Div= 20μ S/Div



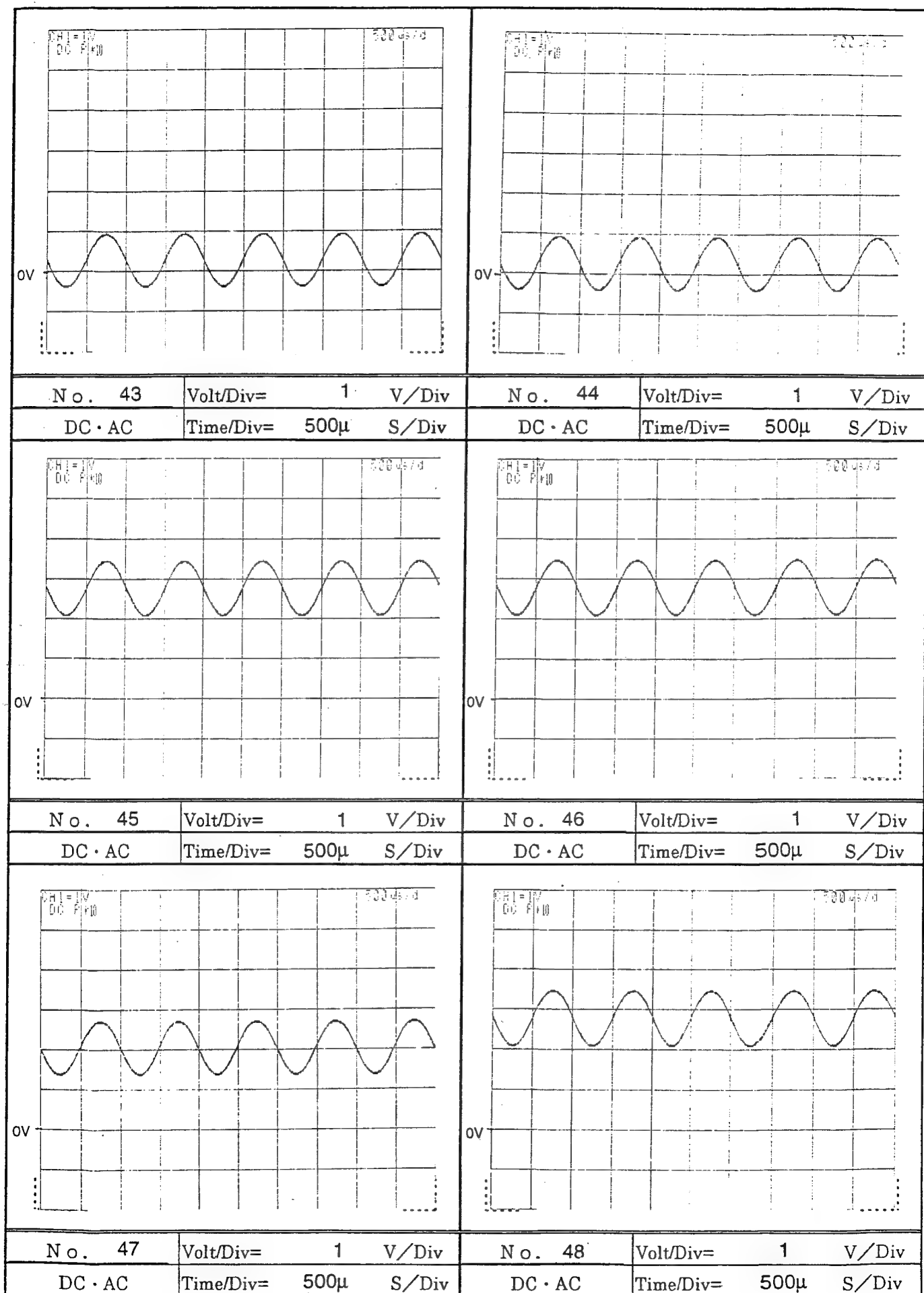
No. 39 Volt/Div= 1 V/Div  
DC · AC Time/Div= 500μ S/Div

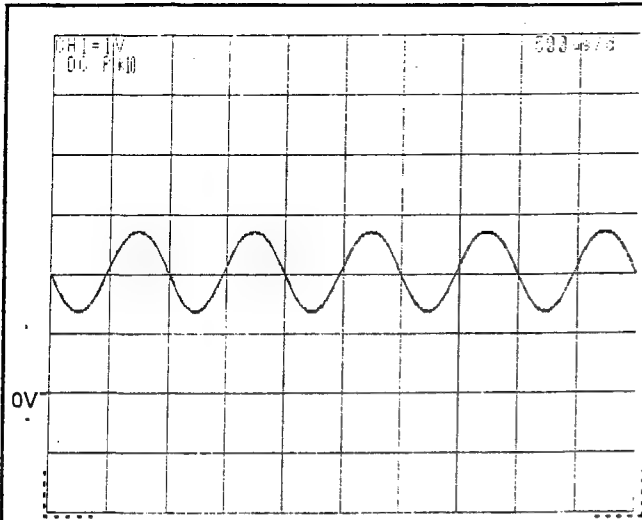
No. 40 Volt/Div= 1 V/Div  
DC · AC Time/Div= 500μ S/Div



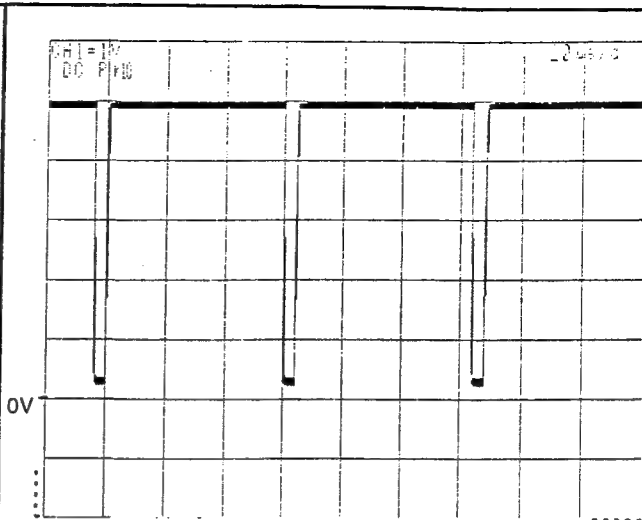
No. 41 Volt/Div= 1 V/Div  
DC · AC Time/Div= 500μ S/Div

No. 42 Volt/Div= 1 V/Div  
DC · AC Time/Div= 500μ S/Div

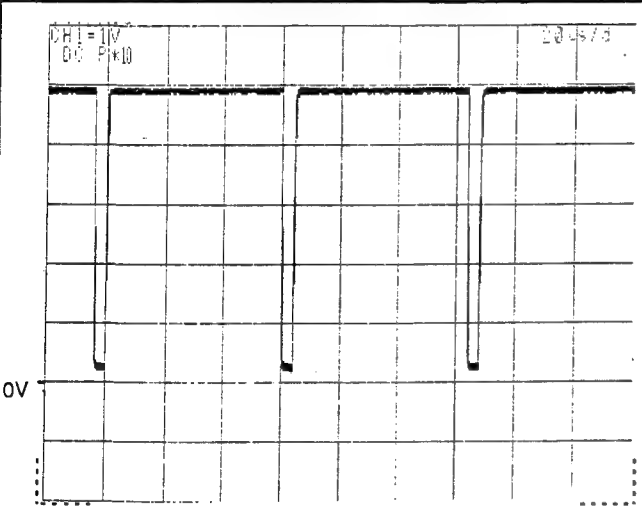




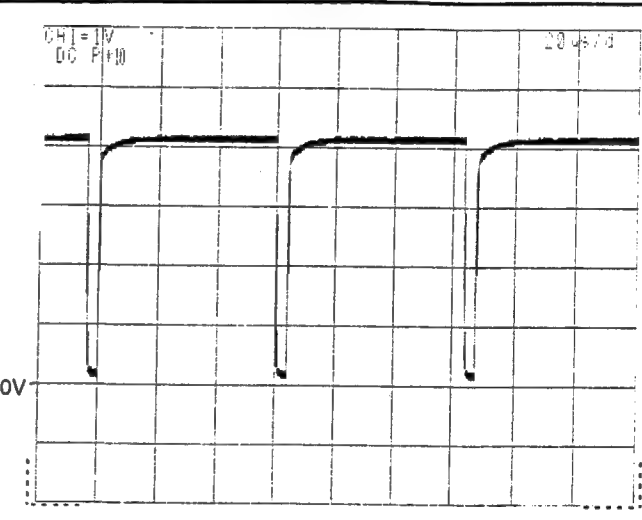
No. 49	Volt/Div= 1 V/Div
DC · AC	Time/Div= 500μ S/Div



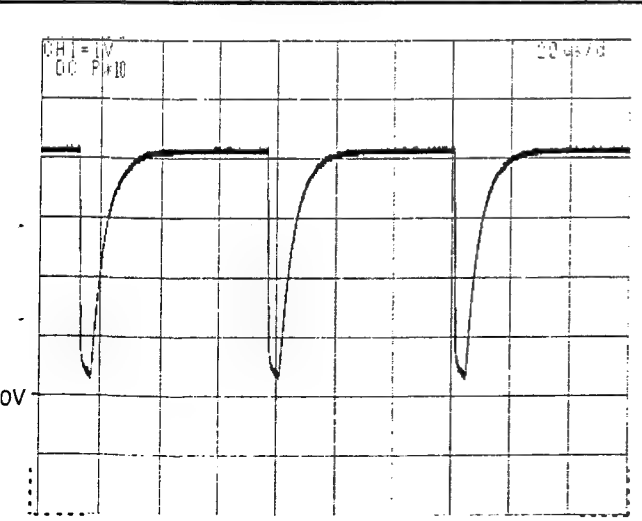
No. 50	Volt/Div= 1 V/Div
DC · AC	Time/Div= 20μ S/Div



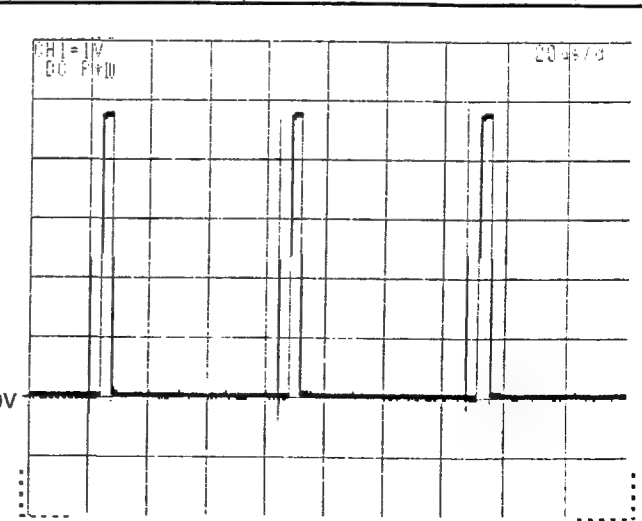
No. 51	Volt/Div= 1 V/Div
DC · AC	Time/Div= 20μ S/Div



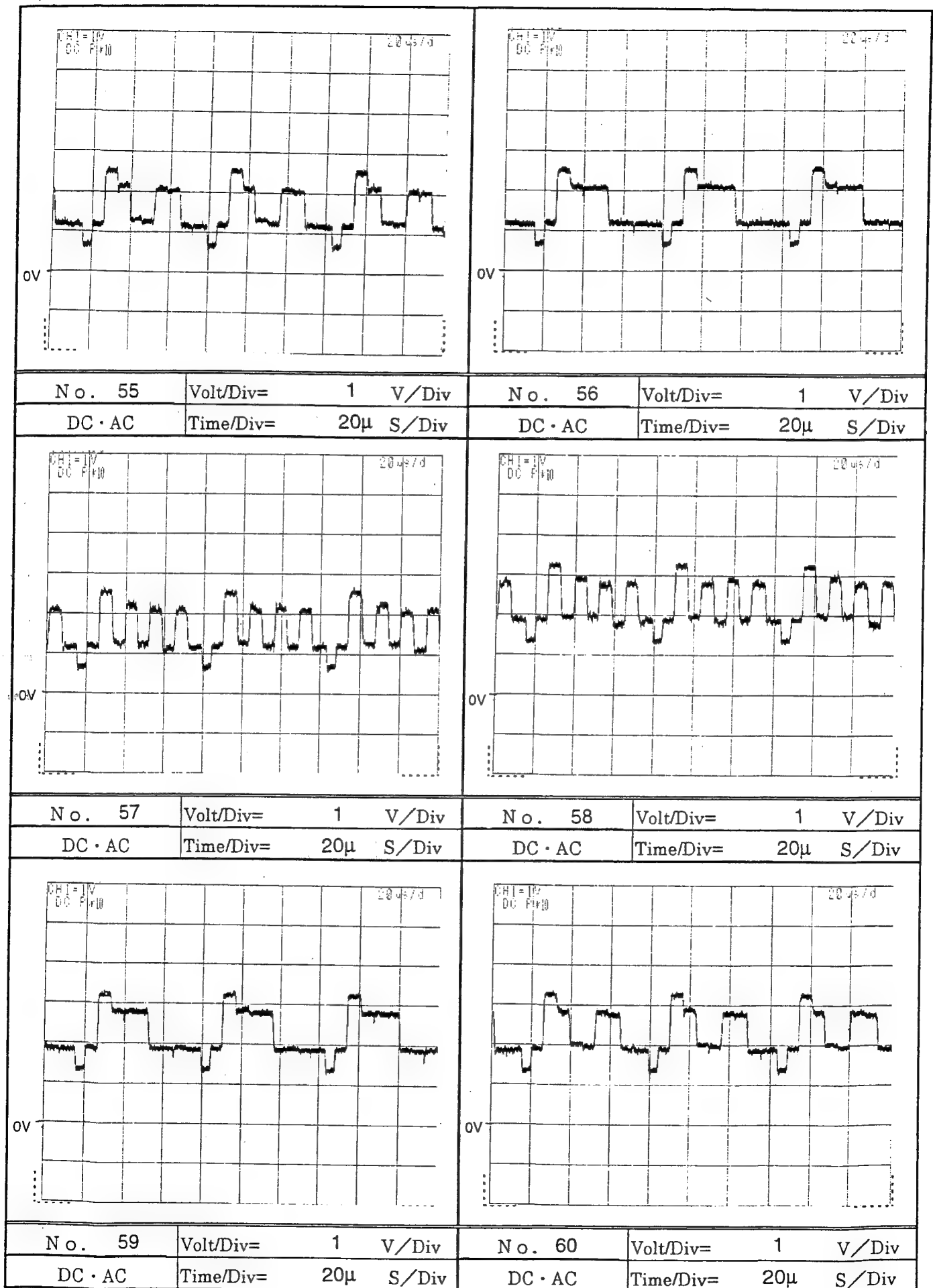
No. 52	Volt/Div= 1 V/Div
DC · AC	Time/Div= 20μ S/Div



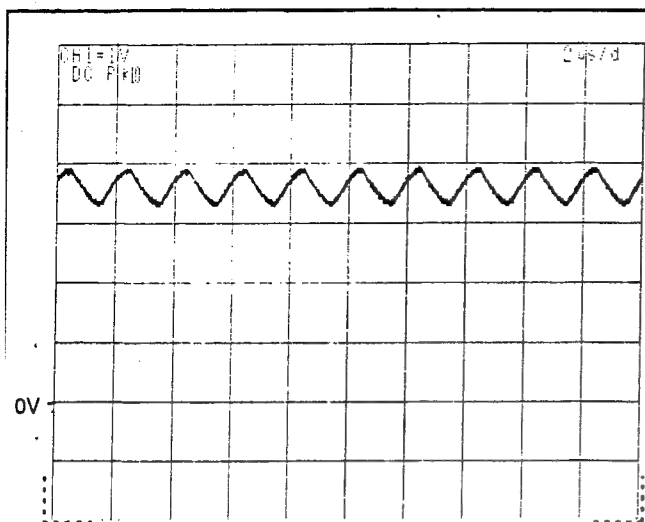
No. 53	Volt/Div= 1 V/Div
DC · AC	Time/Div= 20μ S/Div



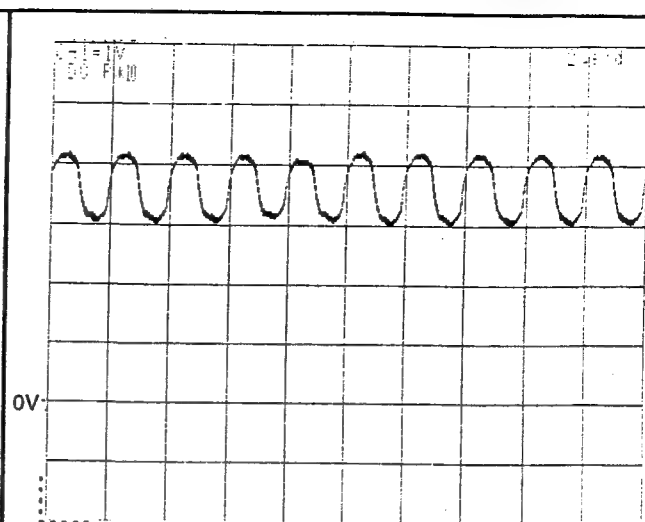
No. 54	Volt/Div= 1 V/Div
DC · AC	Time/Div= 20μ S/Div



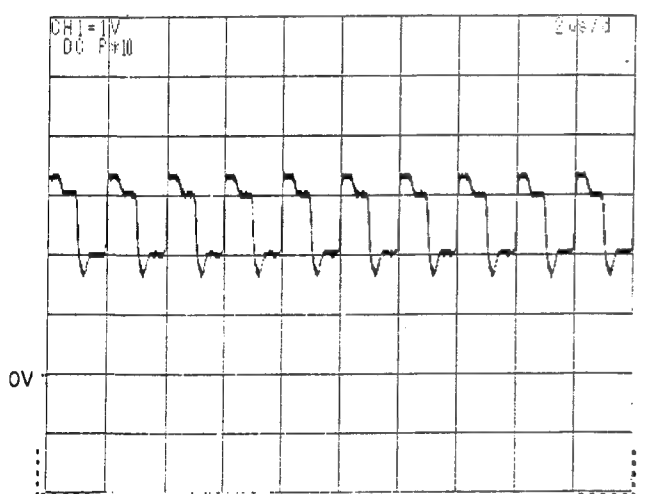




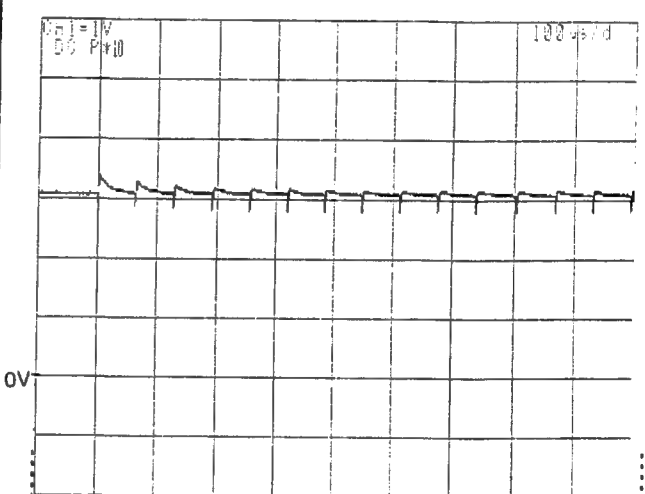
N o. 61	Volt/Div= 1 V/Div
DC · AC	Time/Div= 2μ S/Div



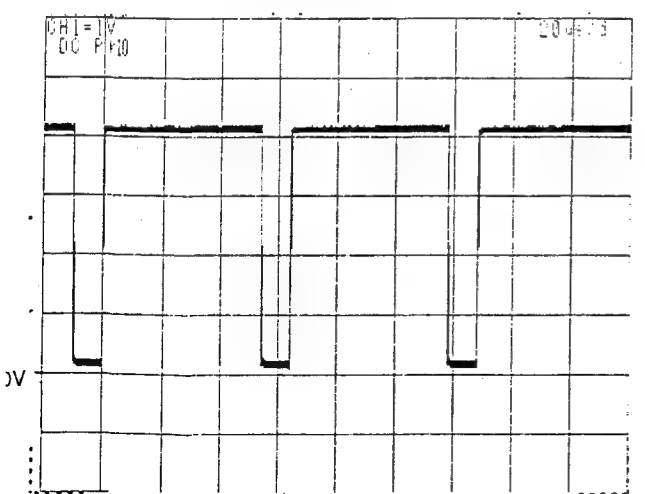
N o. 62	Volt/Div= 1 V/Div
DC · AC	Time/Div= 2μ S/Div



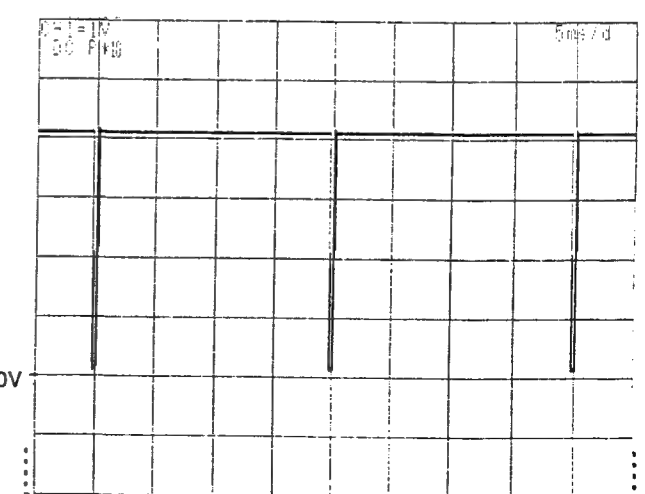
N o. 63	Volt/Div= 1 V/Div
DC · AC	Time/Div= 2μ S/Div



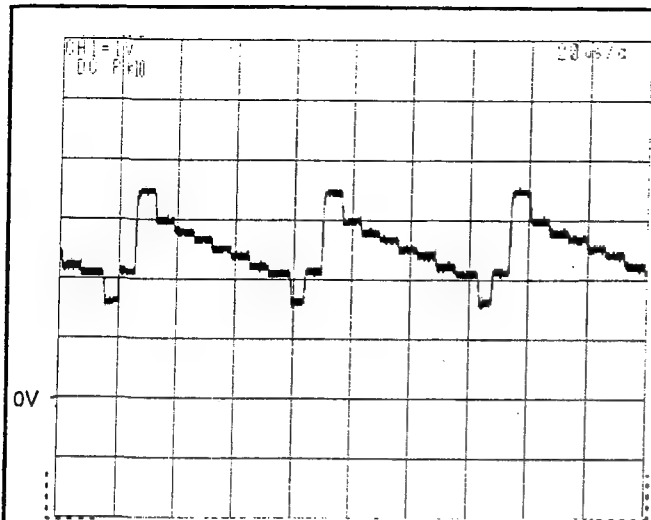
N o. 64	Volt/Div= 1 V/Div
DC · AC	Time/Div= 100μ S/Div



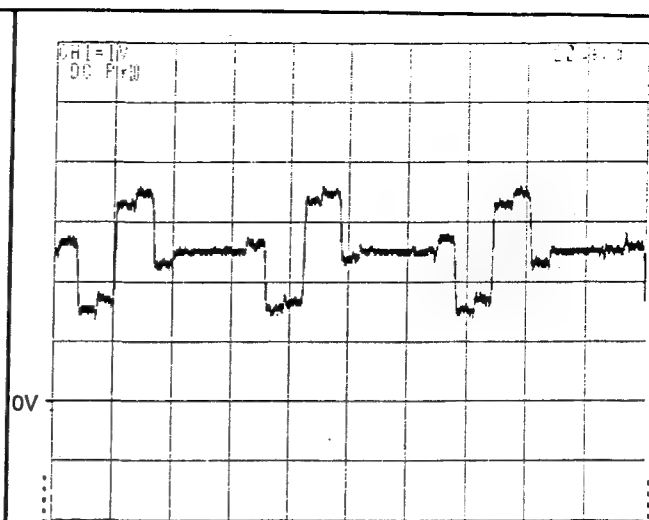
N o. 65	Volt/Div= 1 V/Div
DC · AC	Time/Div= 20μ S/Div



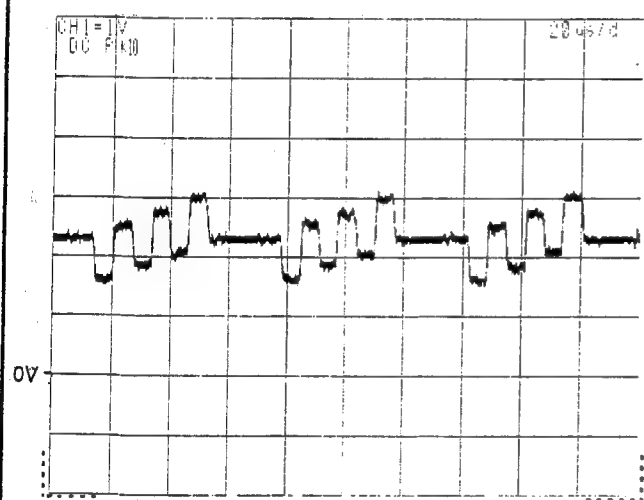
N o. 66	Volt/Div= 1 V/Div
DC · AC	Time/Div= 5m S/Div



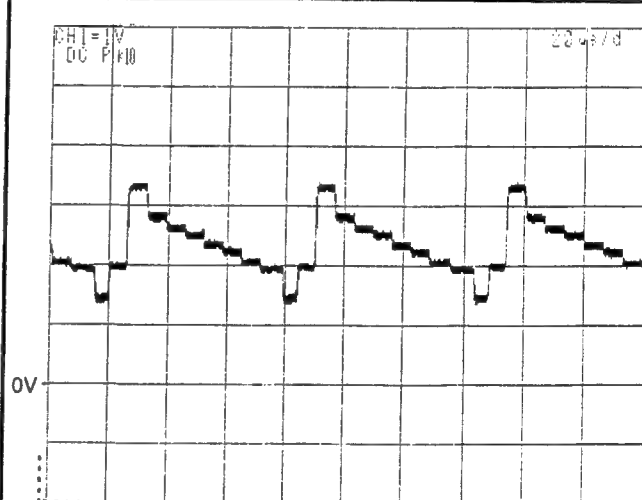
No. 67	Volt/Div= 1 V/Div
DC · AC	Time/Div= 20μ S/Div



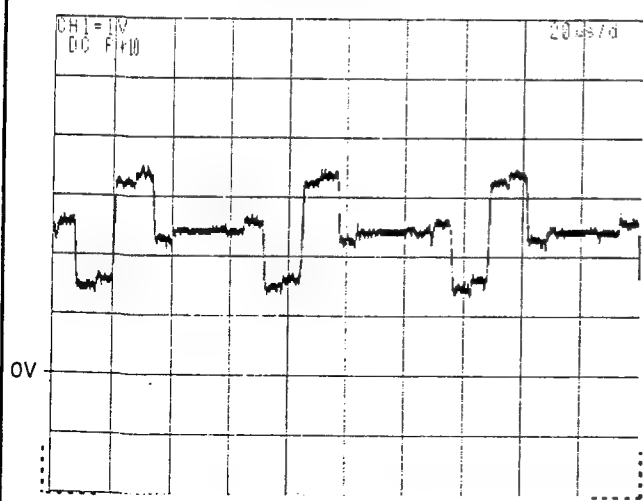
No. 68	Volt/Div= 1 V/Div
DC · AC	Time/Div= 20μ S/Div



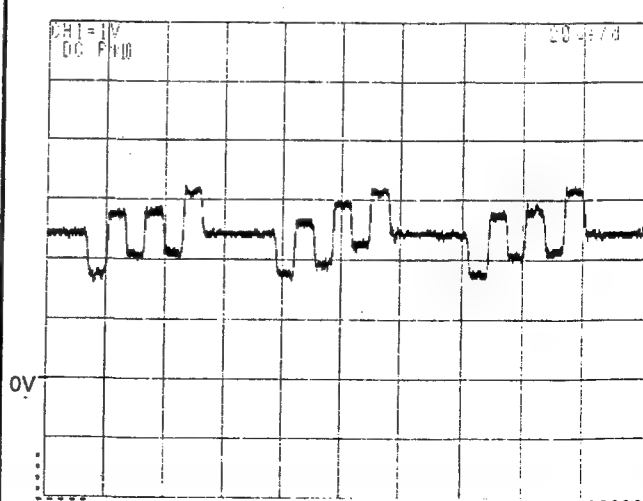
No. 69	Volt/Div= 1 V/Div
DC · AC	Time/Div= 20μ S/Div



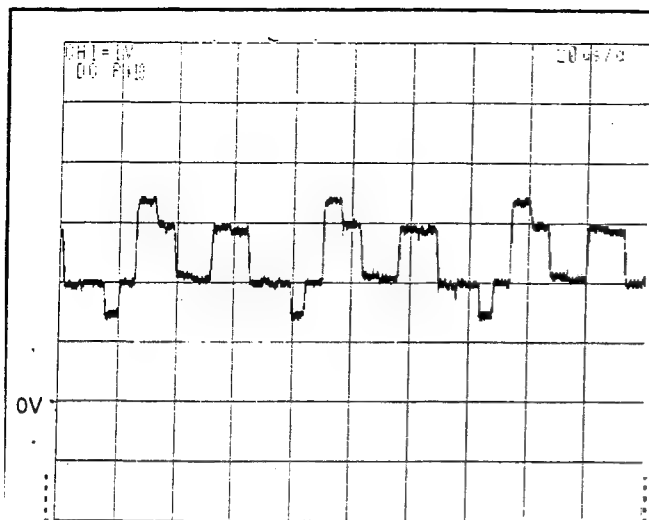
No. 70	Volt/Div= 1 V/Div
DC · AC	Time/Div= 20μ S/Div



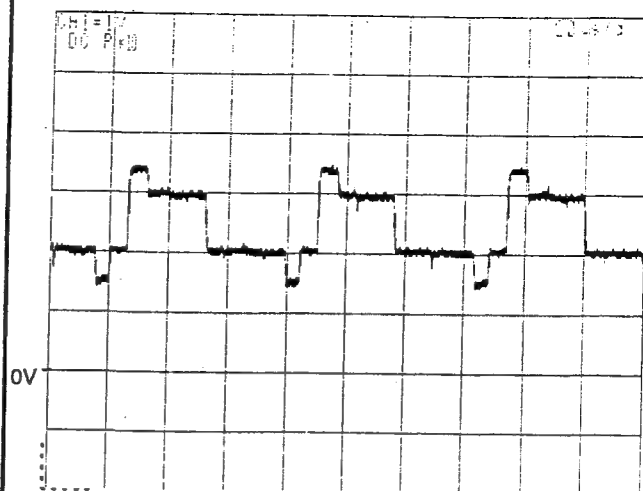
No. 71	Volt/Div= 1 V/Div
DC · AC	Time/Div= 20μ S/Div



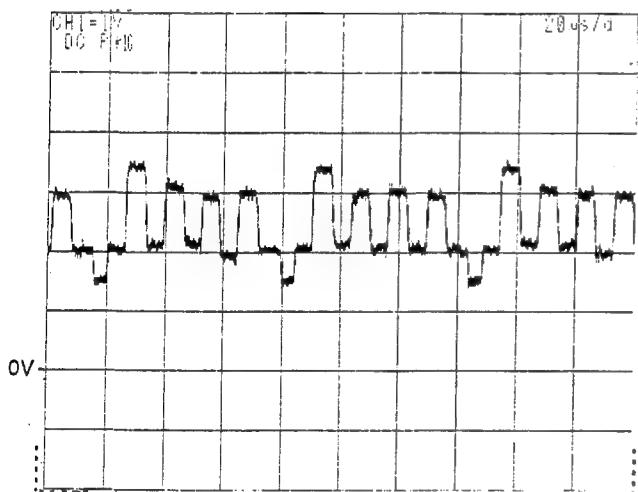
No. 72	Volt/Div= 1 V/Div
DC · AC	Time/Div= 20μ S/Div



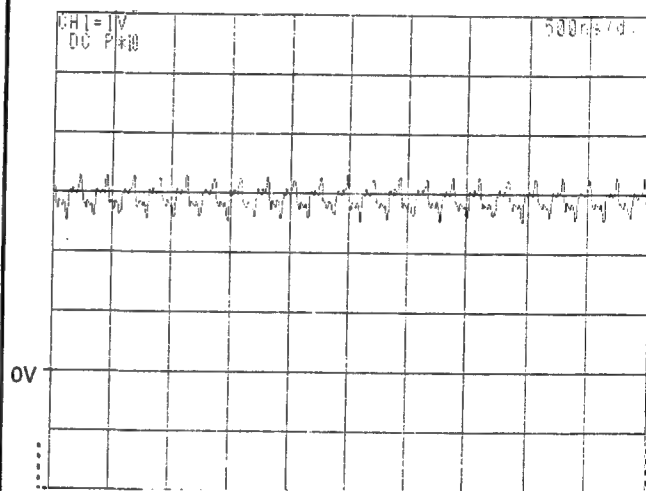
No. 73 Volt/Div= 1 V/Div  
DC · AC Time/Div= 20μ S/Div



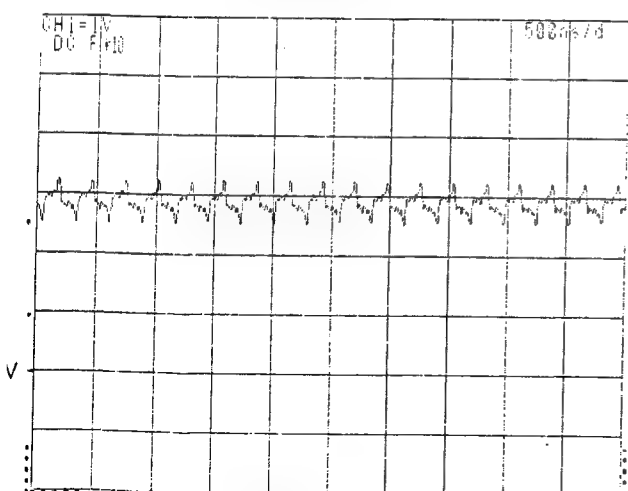
No. 74 Volt/Div= 1 V/Div  
DC · AC Time/Div= 20μ S/Div



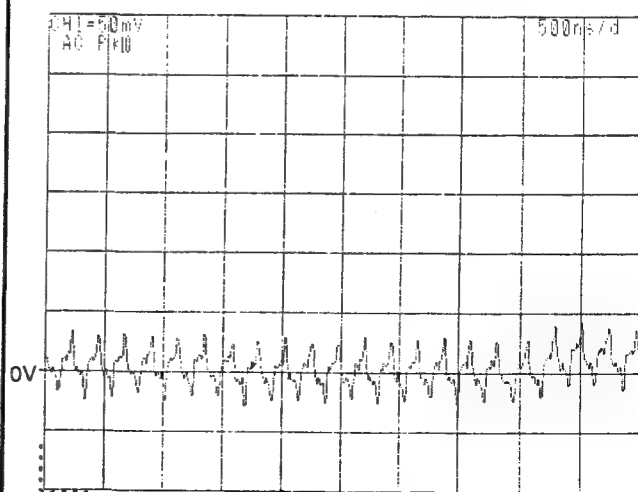
No. 75 Volt/Div= 1 V/Div  
DC · AC Time/Div= 20μ S/Div



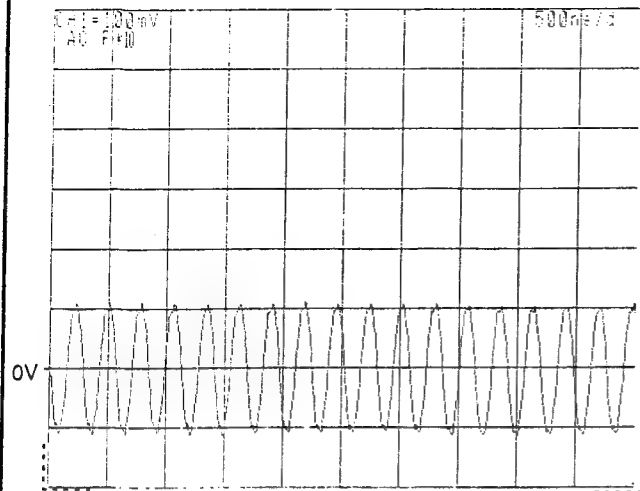
No. 76 Volt/Div= 1 V/Div  
DC · AC Time/Div= 500n S/Div



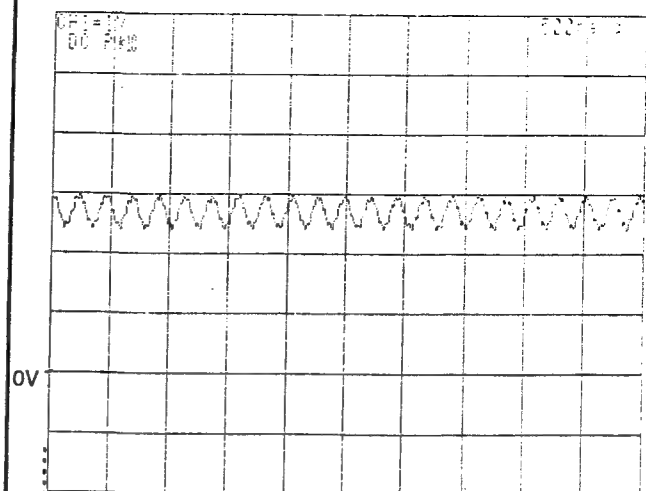
No. 77 Volt/Div= 1 V/Div  
DC · AC Time/Div= 500n S/Div



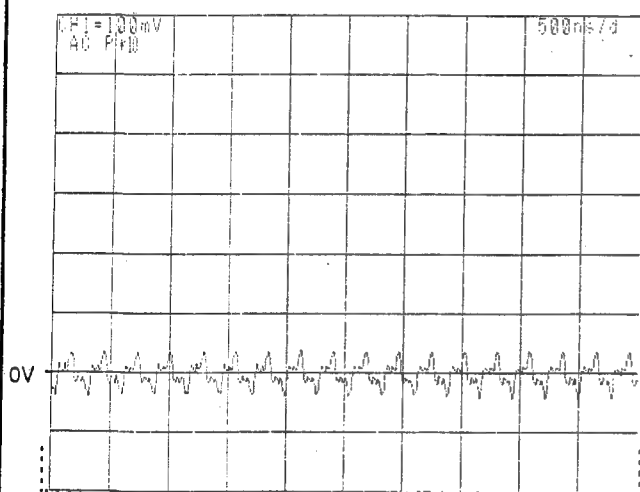
No. 78 Volt/Div= 50m V/Div  
DC · AC Time/Div= 500n S/Div



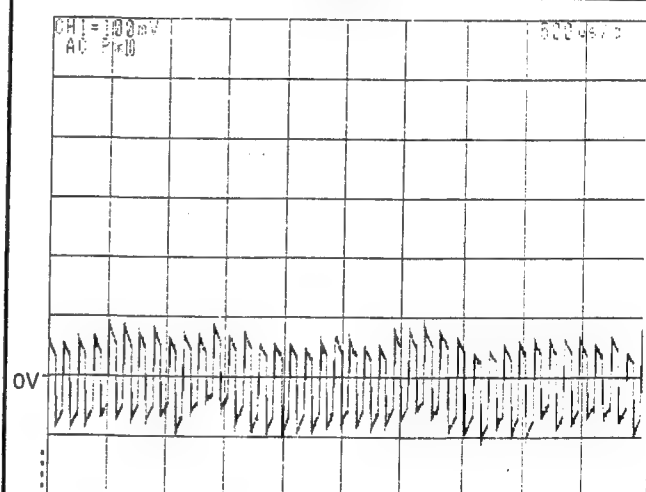
No. 79 Volt/Div= 100m V/Div  
DC · AC Time/Div= 500n S/Div



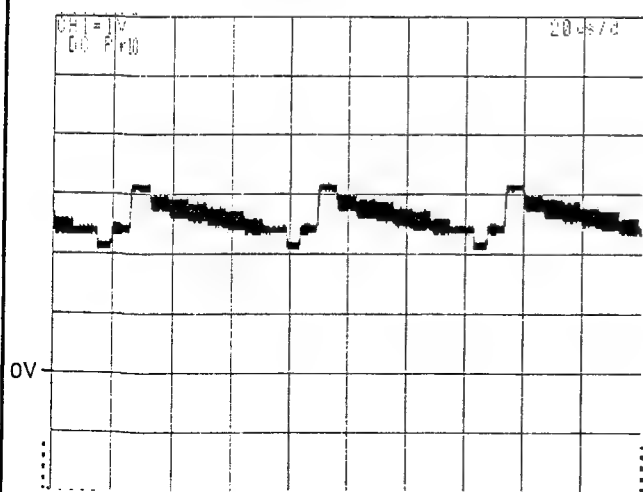
No. 80 Volt/Div= 1 V/Div  
DC · AC Time/Div= 500n S/Div



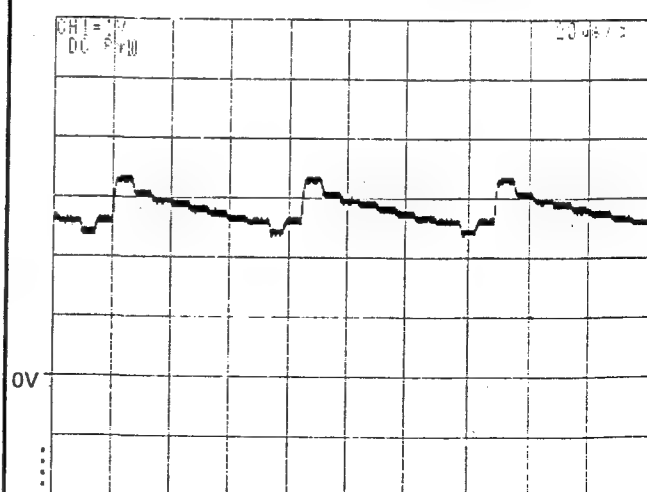
No. 81 Volt/Div= 100m V/Div  
DC · AC Time/Div= 500n S/Div



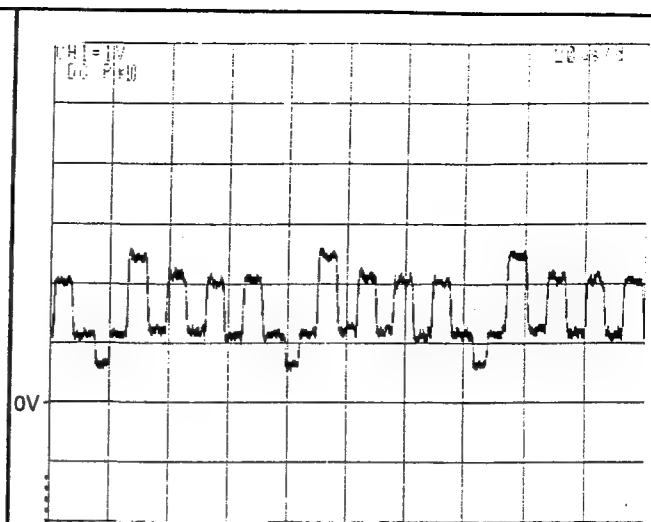
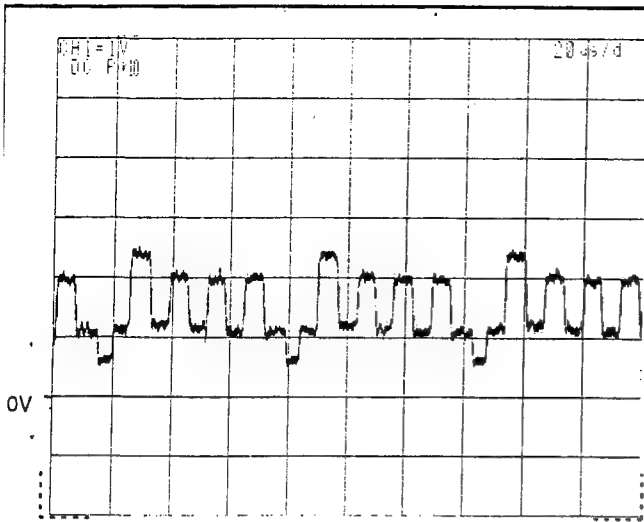
No. 82 Volt/Div= 100m V/Div  
DC · AC Time/Div= 500μ S/Div



No. 83 Volt/Div= 1 V/Div  
DC · AC Time/Div= 20μ S/Div

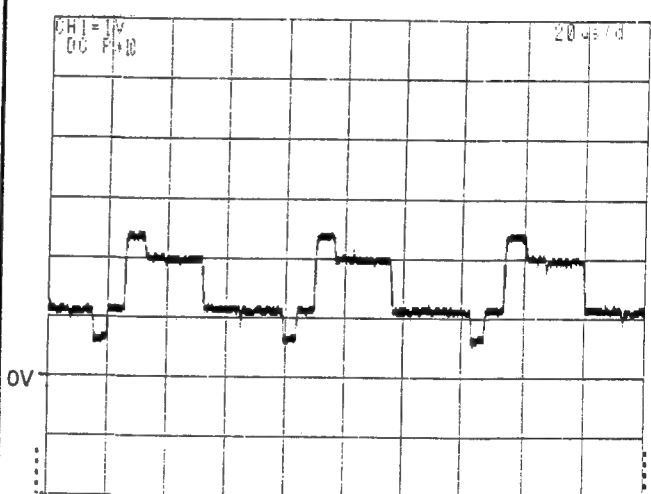
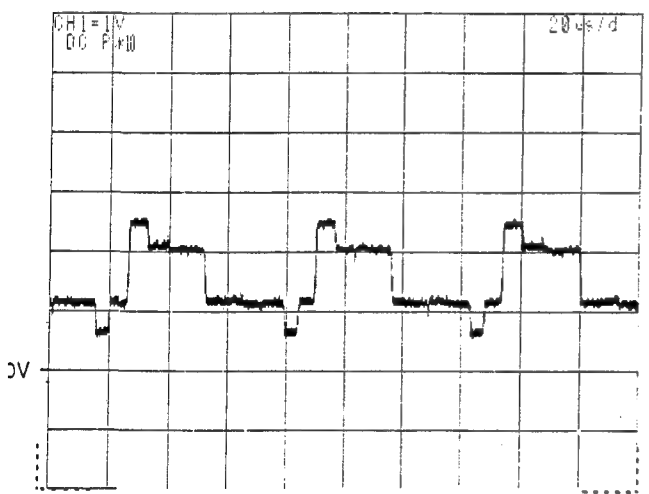


No. 84 Volt/Div= 1 V/Div  
DC · AC Time/Div= 20μ S/Div



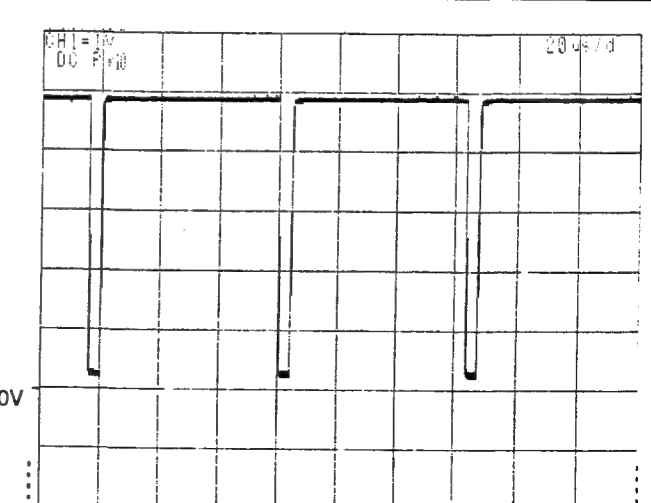
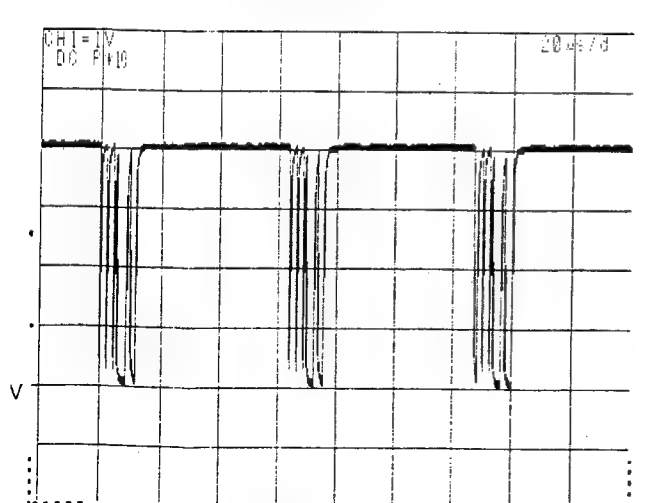
N o. 85	Volt/Div= 1 V/Div
DC · AC	Time/Div= 20 $\mu$ S/Div

N o. 86	Volt/Div= 1 V/Div
DC · AC	Time/Div= 20 $\mu$ S/Div



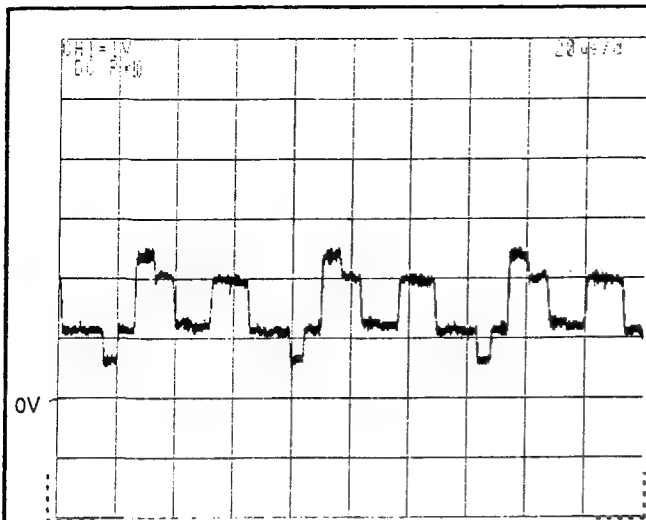
N o. 87	Volt/Div= 1 V/Div
DC · AC	Time/Div= 20 $\mu$ S/Div

N o. 88	Volt/Div= 1 V/Div
DC · AC	Time/Div= 20 $\mu$ S/Div

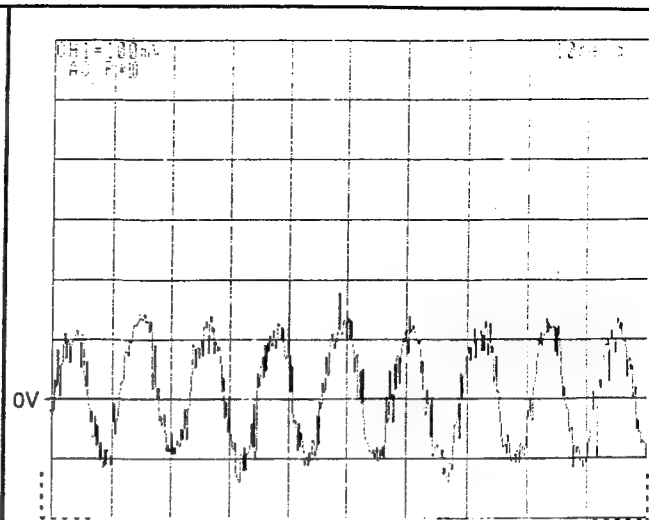


N o. 89	Volt/Div= 1 V/Div
DC · AC	Time/Div= 20 $\mu$ S/Div

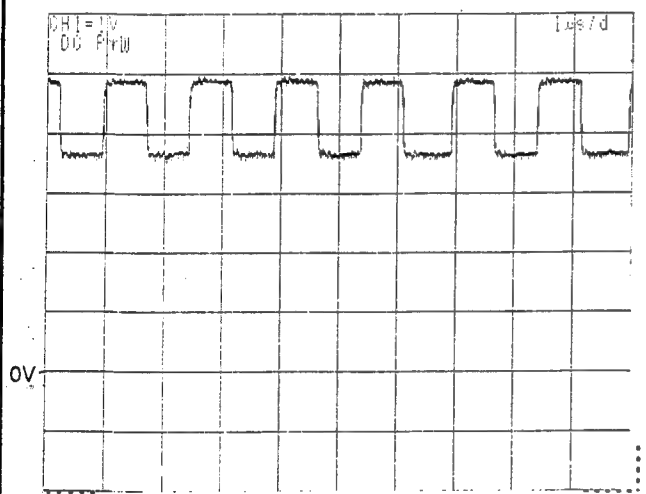
N o. 90	Volt/Div= 1 V/Div
DC · AC	Time/Div= 20 $\mu$ S/Div



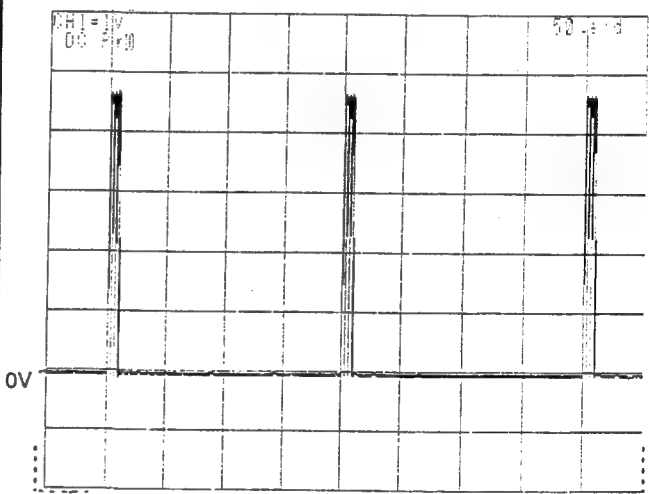
No. 91 Volt/Div= 1 V/Div  
DC · AC Time/Div= 20μ S/Div



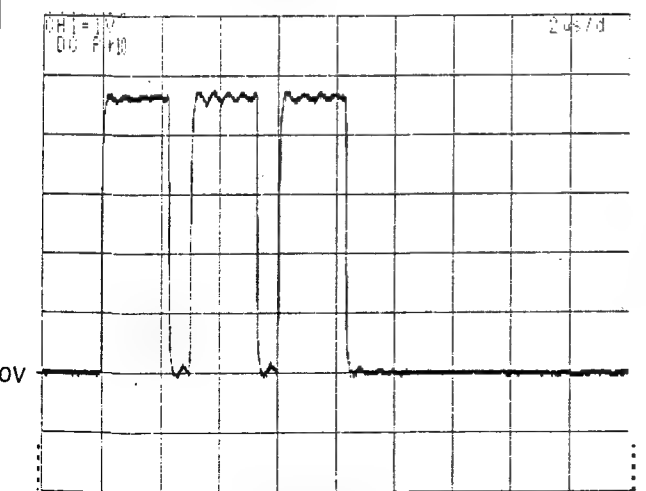
No. 92 Volt/Div= 100m V/Div  
DC · AC Time/Div= 10n S/Div



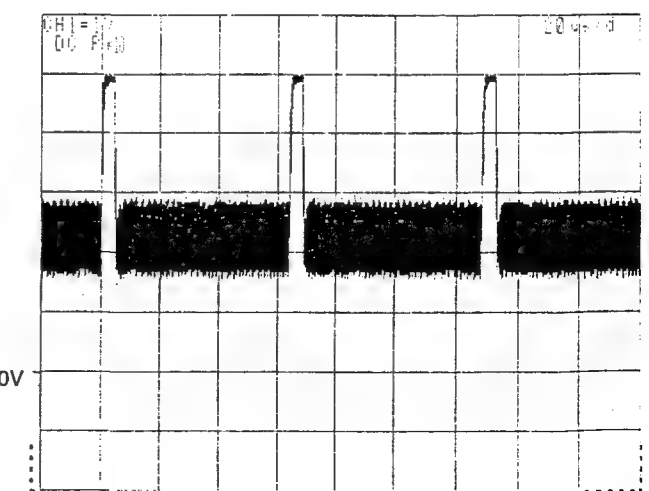
No. 93 Volt/Div= 1 V/Div  
DC · AC Time/Div= 1μ S/Div



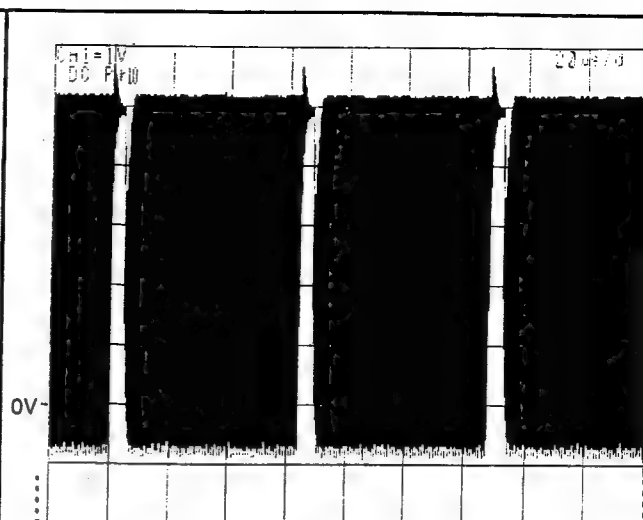
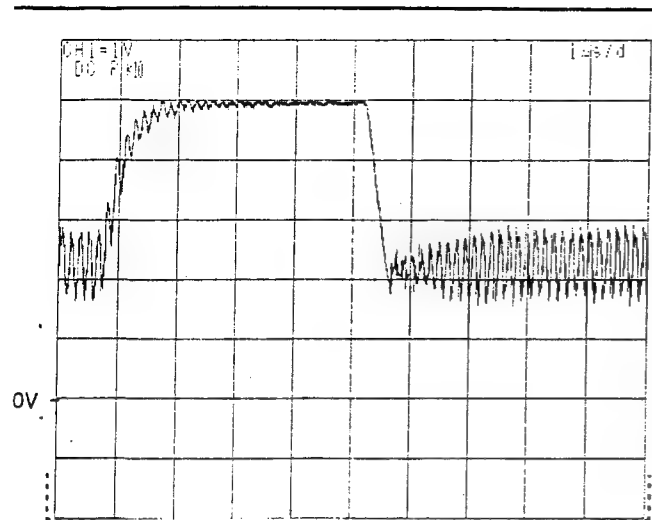
No. 94 Volt/Div= 1 V/Div  
DC · AC Time/Div= 50μ S/Div



No. 95 Volt/Div= 1 V/Div  
DC · AC Time/Div= 2μ S/Div

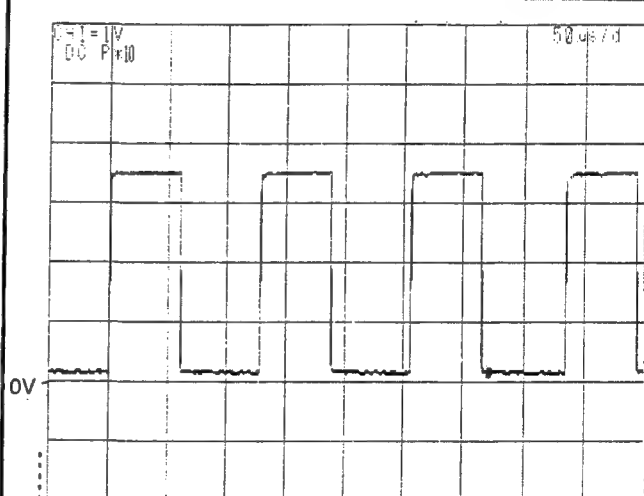
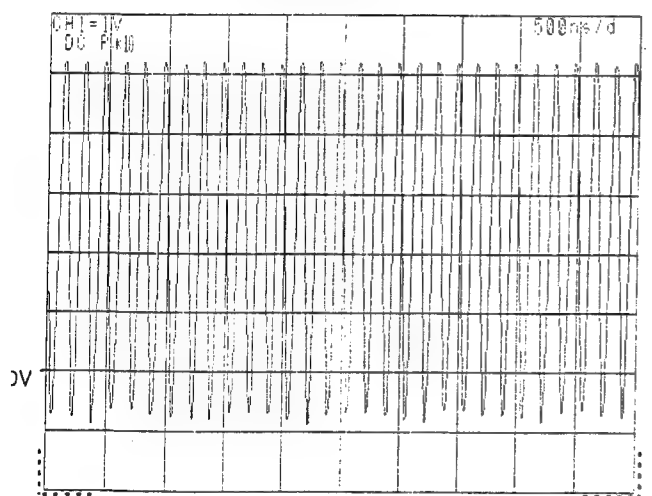


No. 96 Volt/Div= 1 V/Div  
DC · AC Time/Div= 20μ S/Div



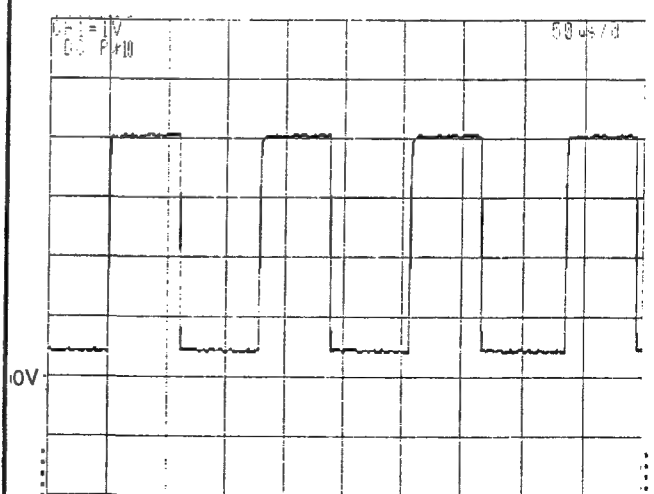
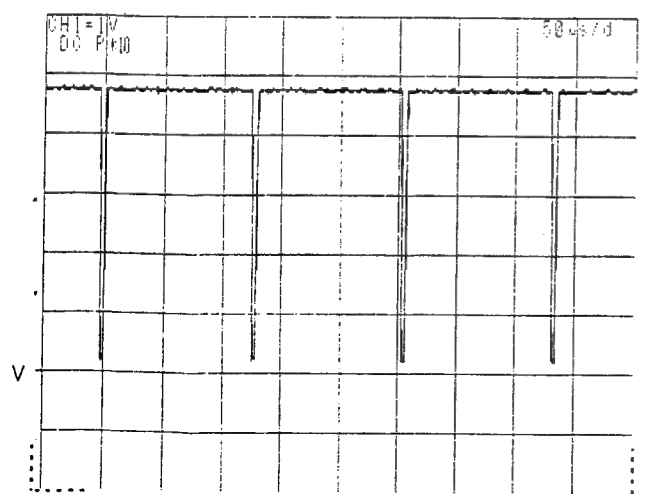
No. 97 Volt/Div= 1 V/Div  
DC · AC Time/Div= 1μ S/Div

No. 98 Volt/Div= 1 V/Div  
DC · AC Time/Div= 20μ S/Div



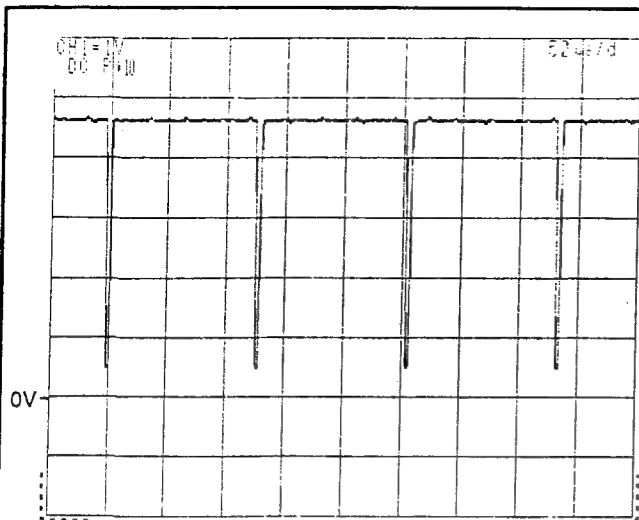
No. 99 Volt/Div= 1 V/Div  
DC · AC Time/Div= 500n S/Div

No. 100 Volt/Div= 1 V/Div  
DC · AC Time/Div= 50μ S/Div

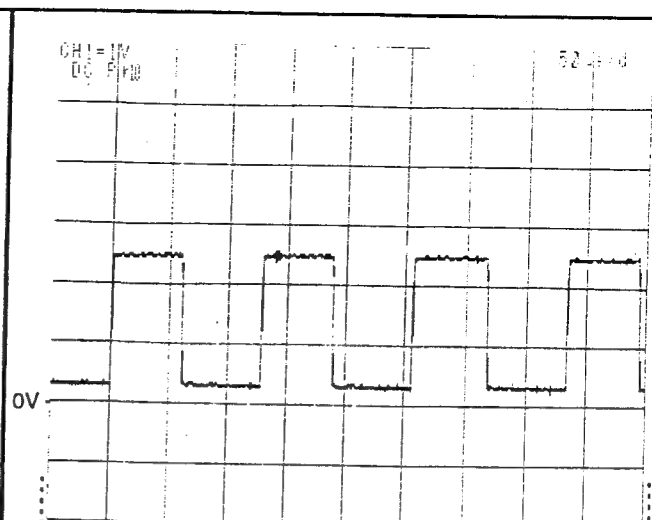


No. 101 Volt/Div= 1 V/Div  
DC · AC Time/Div= 50μ S/Div

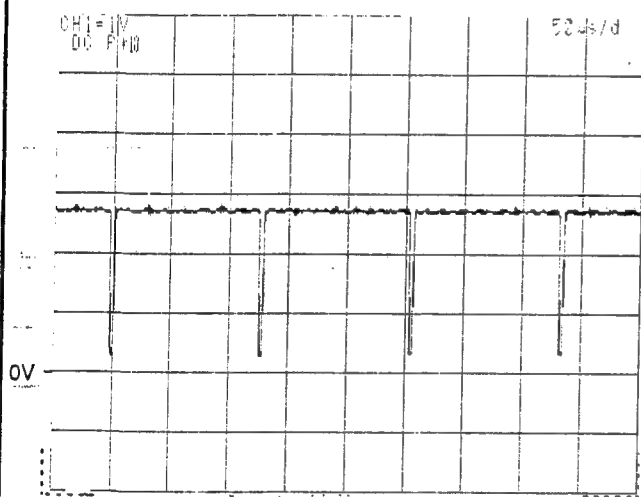
No. 102 Volt/Div= 1 V/Div  
DC · AC Time/Div= 50μ S/Div



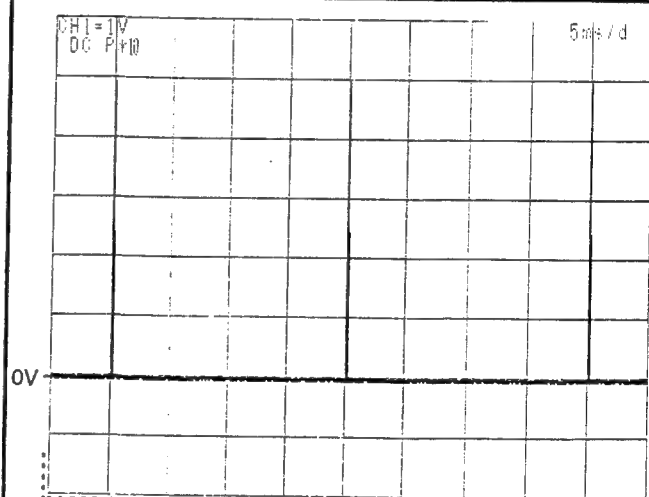
No. 103	Volt/Div= 1 V/Div
DC · AC	Time/Div= 50µ S/Div



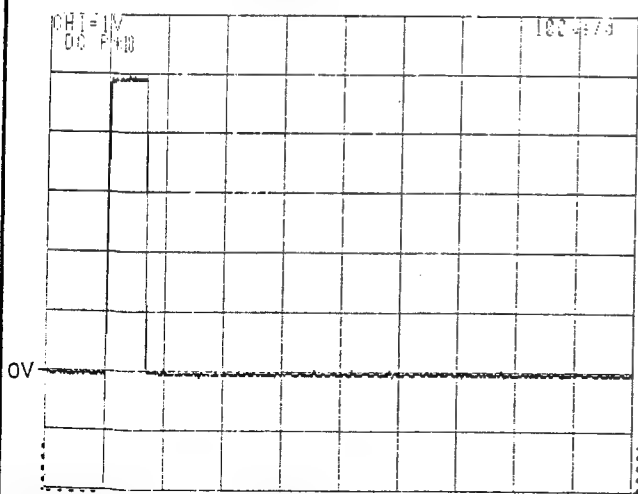
No. 104	Volt/Div= 1 V/Div
DC · AC	Time/Div= 50µ S/Div



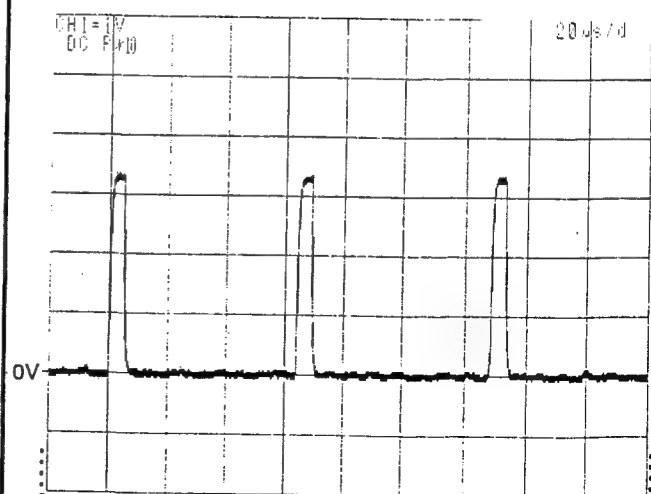
No. 105	Volt/Div= 1 V/Div
DC · AC	Time/Div= 50µ S/Div



No. 106	Volt/Div= 1 V/Div
DC · AC	Time/Div= 5m S/Div

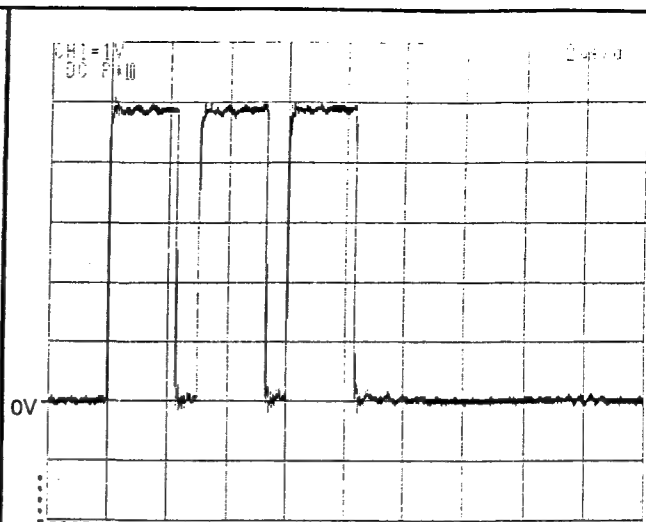
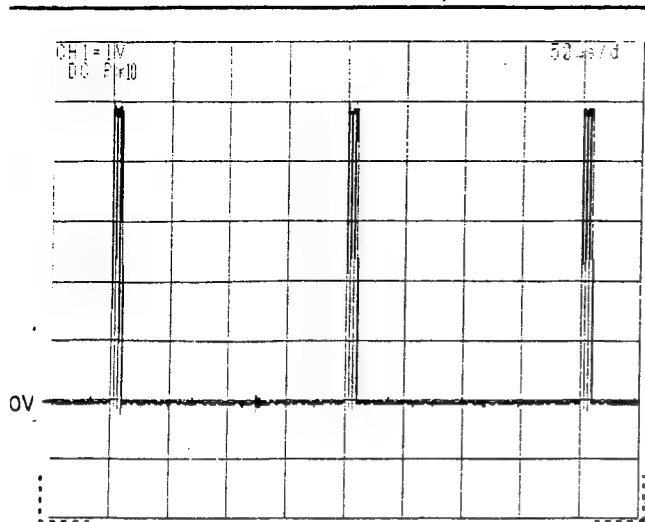


No. 107	Volt/Div= 1 V/Div
DC · AC	Time/Div= 100µ S/Div



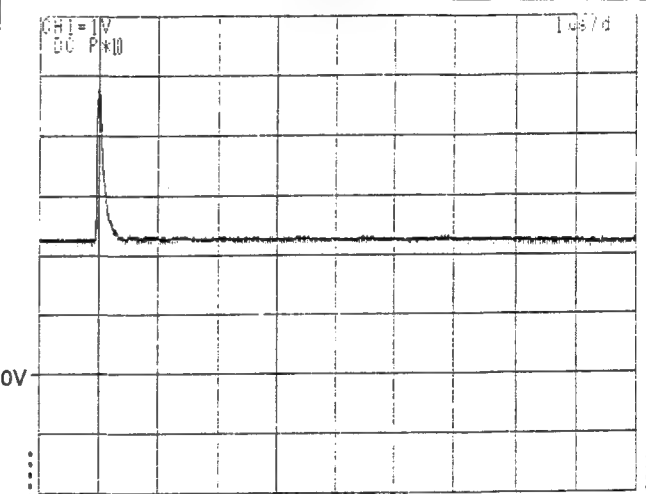
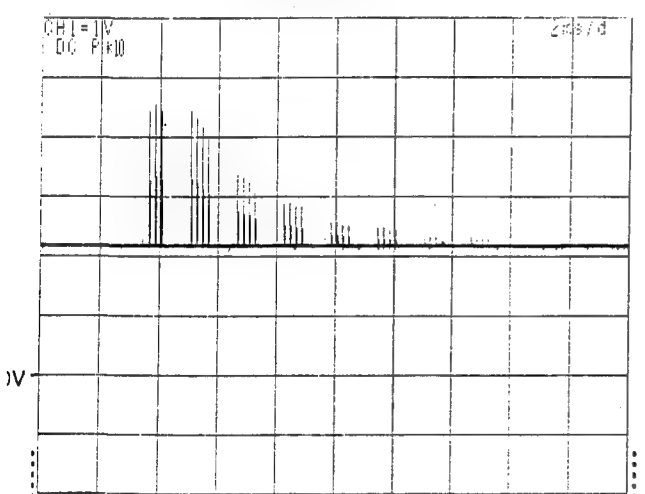
No. 108	Volt/Div= 1 V/Div
DC · AC	Time/Div= 20µ S/Div





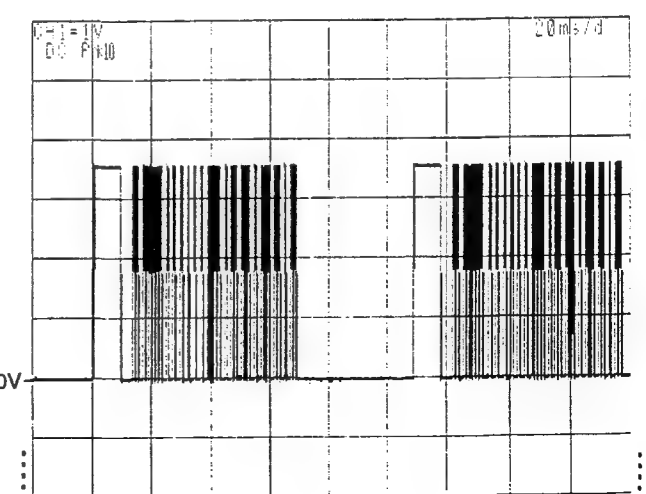
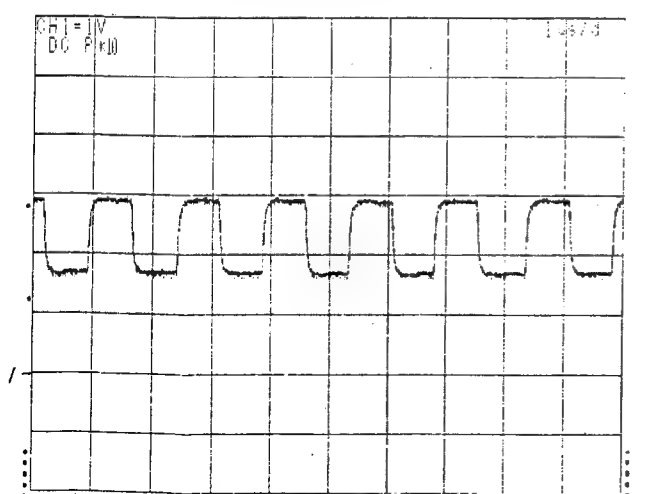
No. 109	Volt/Div=	1 V/Div
DC · AC	Time/Div=	50μ S/Div

No. 110	Volt/Div=	1 V/Div
DC · AC	Time/Div=	2μ S/Div



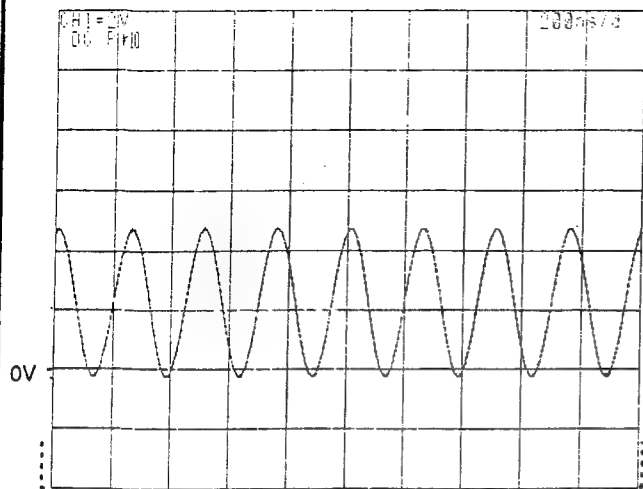
No. 111	Volt/Div=	1 V/Div
DC · AC	Time/Div=	2m S/Div

No. 112	Volt/Div=	1 V/Div
DC · AC	Time/Div=	1μ S/Div

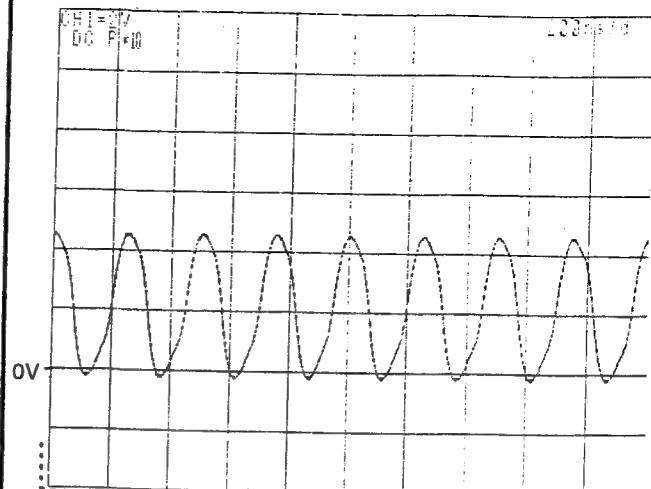


No. 113	Volt/Div=	1 V/Div
DC · AC	Time/Div=	1μ S/Div

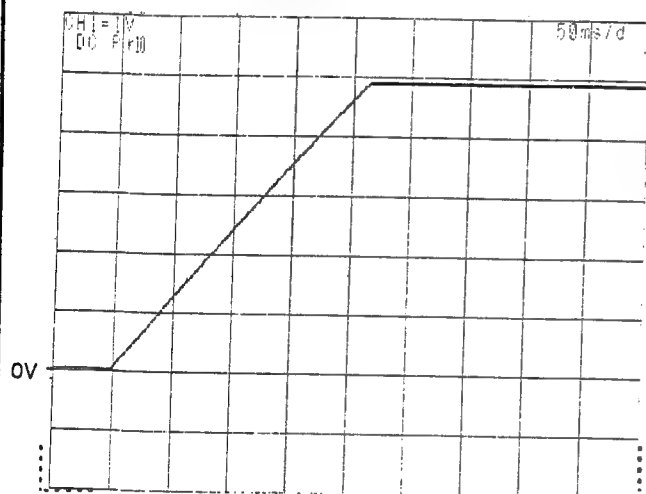
No. 114	Volt/Div=	1 V/Div
DC · AC	Time/Div=	20m S/Div



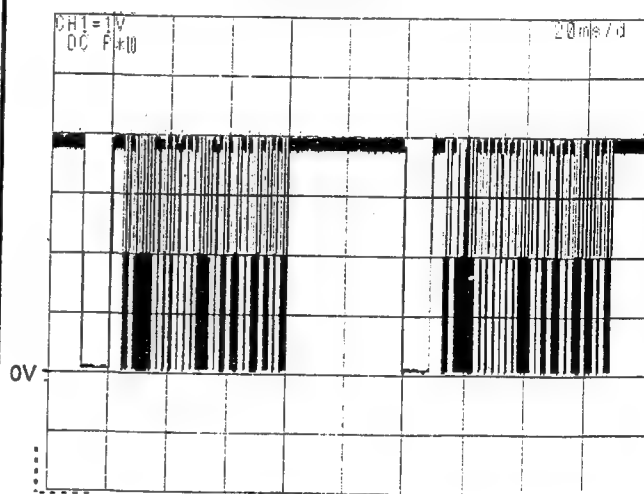
No. 115 Volt/Div= 2 V/Div  
DC · AC Time/Div= 200n S/Div



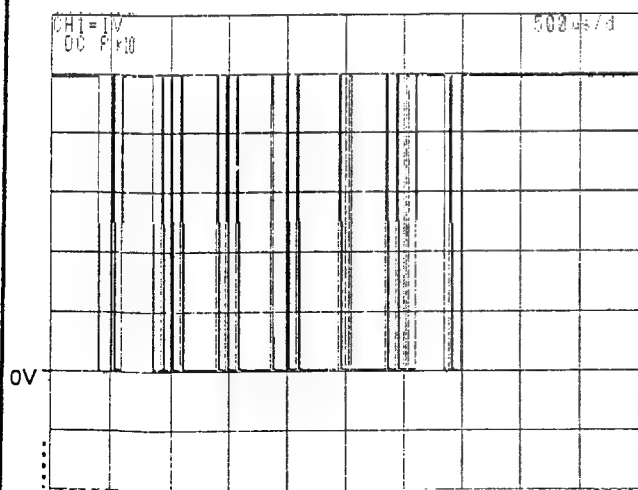
No. 116 Volt/Div= 2 V/Div  
DC · AC Time/Div= 200n S/Div



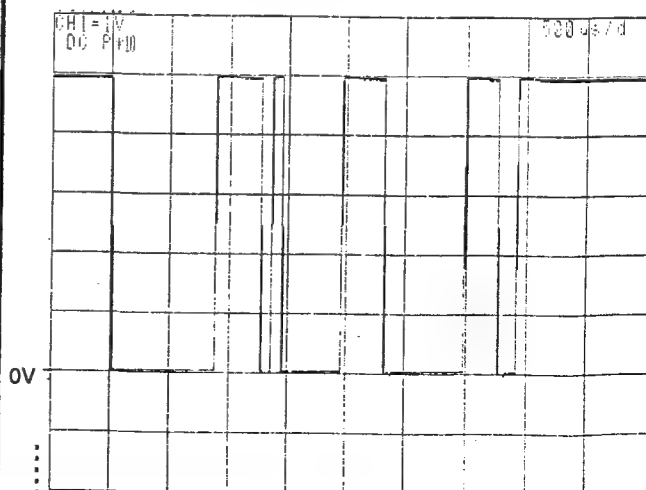
No. 117 Volt/Div= 1 V/Div  
DC · AC Time/Div= 50m S/Div



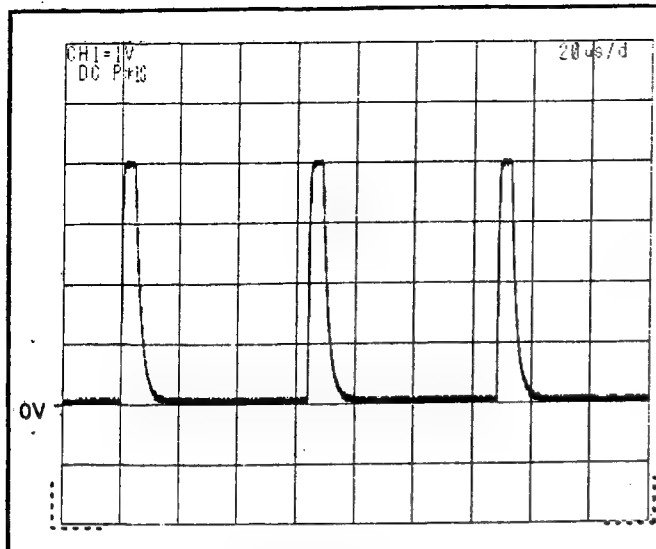
No. 118 Volt/Div= 1 V/Div  
DC · AC Time/Div= 20m S/Div



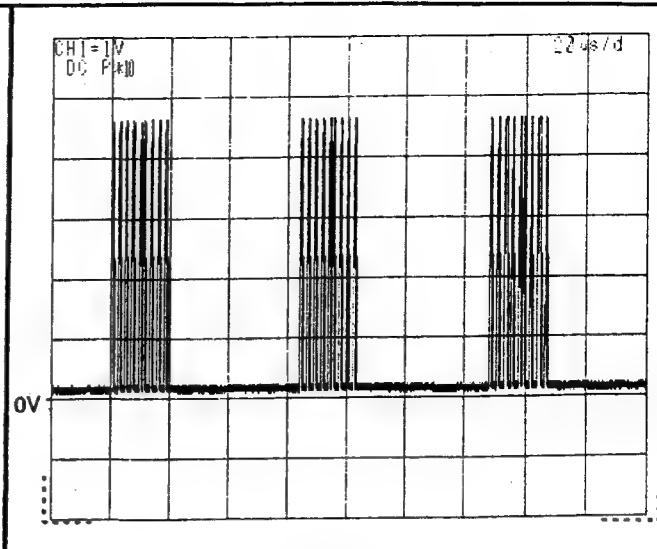
No. 119 Volt/Div= 1 V/Div  
DC · AC Time/Div= 500μ S/Div



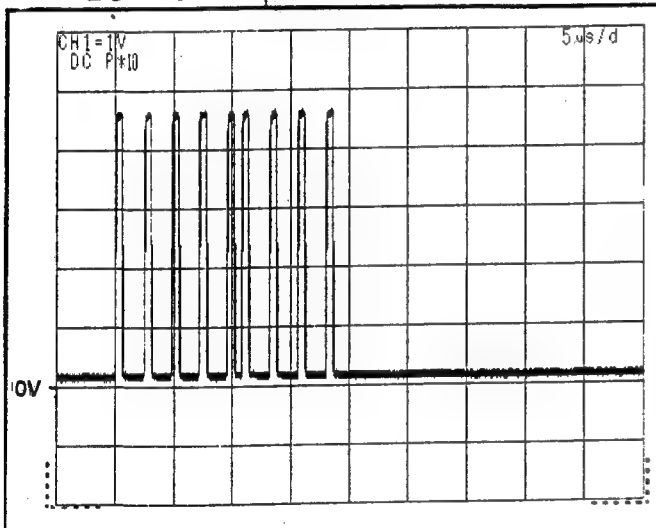
No. 120 Volt/Div= 1 V/Div  
DC · AC Time/Div= 500μ S/Div



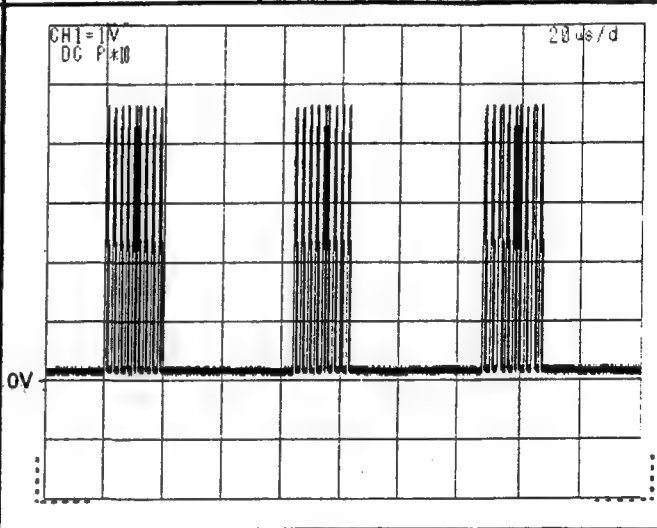
No. 121 Volt/Div= 1 V/Div  
DC · AC Time/Div= 20μ S/Div



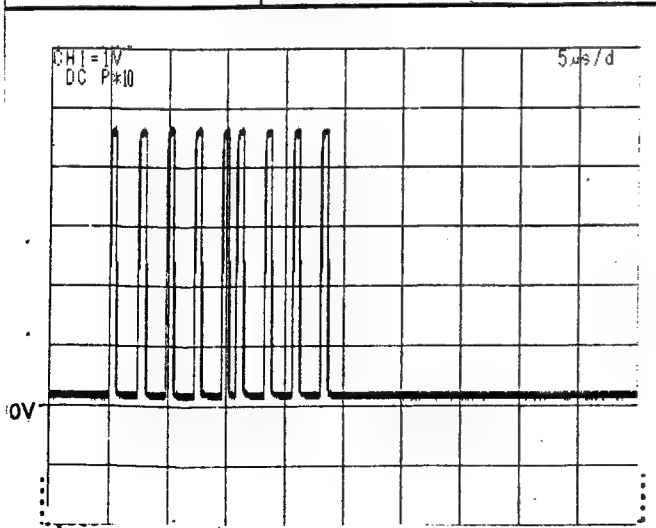
No. 122 Volt/Div= 1 V/Div  
DC · AC Time/Div= 20μ S/Div



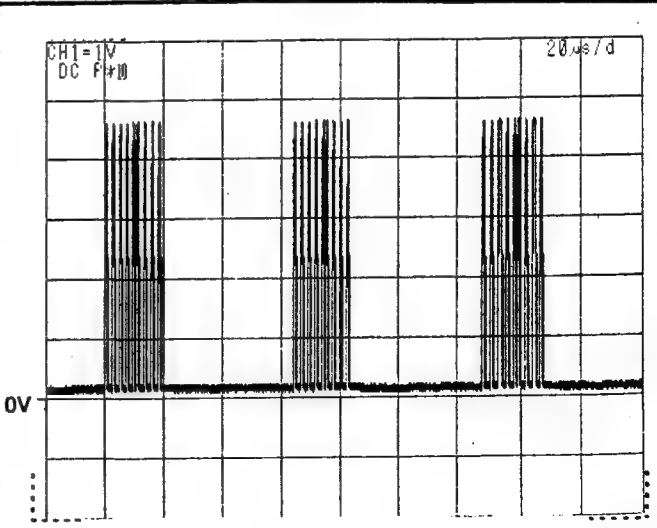
No. 123 Volt/Div= 1 V/Div  
DC · AC Time/Div= 5μ S/Div



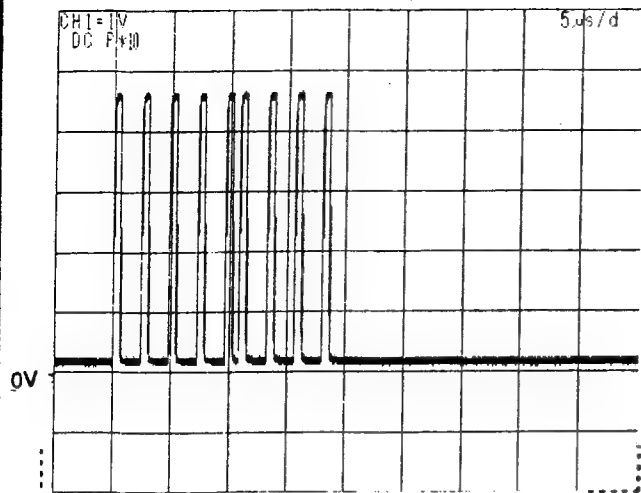
No. 124 Volt/Div= 1 V/Div  
DC · AC Time/Div= 20μ S/Div



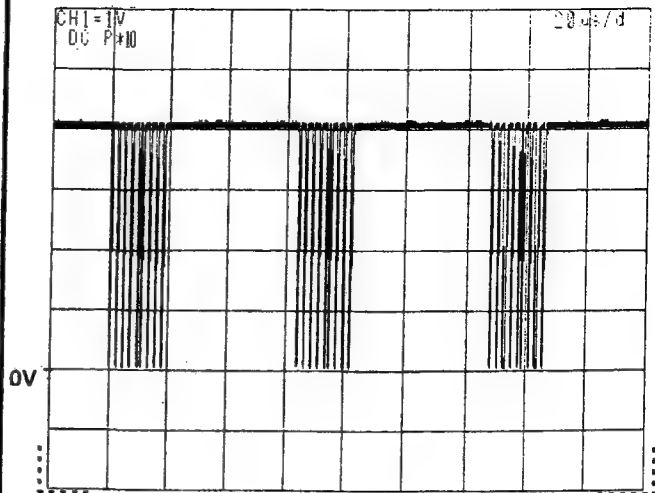
No. 125 Volt/Div= 1 V/Div  
DC · AC Time/Div= 5μ S/Div



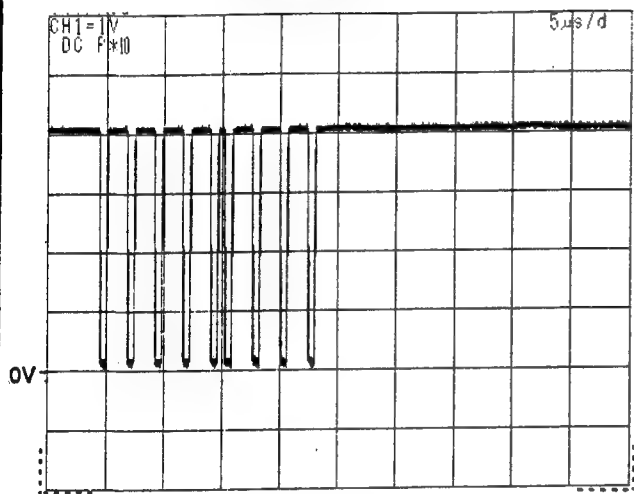
No. 126 Volt/Div= 1 V/Div  
DC · AC Time/Div= 20μ S/Div



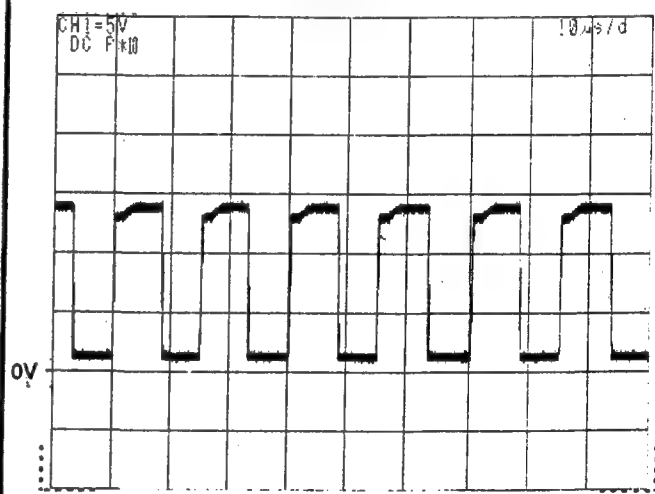
No. 127 Volt/Div= 1 V/Div  
DC · AC Time/Div= 5µ S/Div



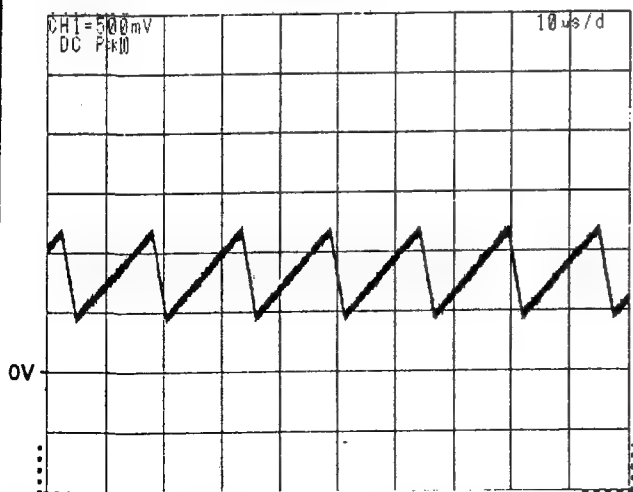
No. 128 Volt/Div= 1 V/Div  
DC · AC Time/Div= 20µ S/Div



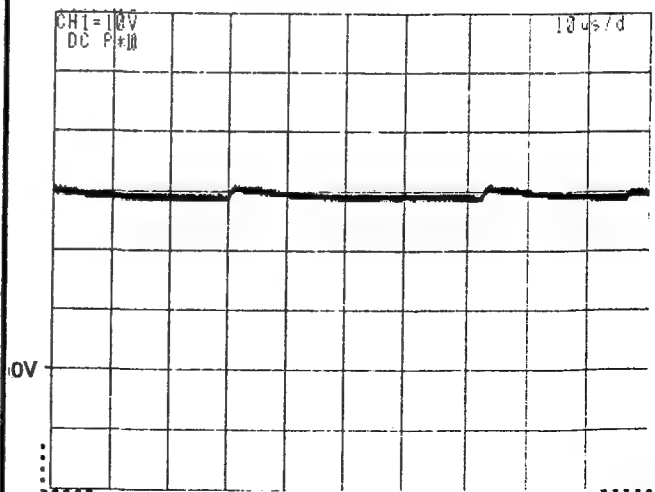
No. 129 Volt/Div= 1 V/Div  
DC · AC Time/Div= 5µ S/Div



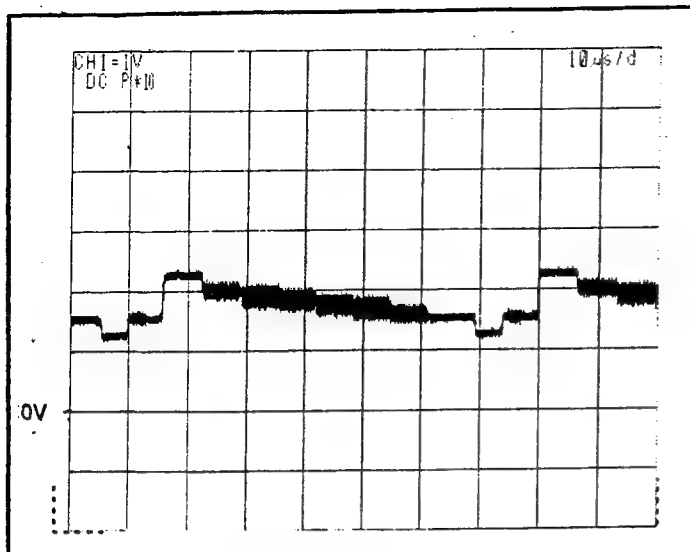
No. 130 Volt/Div= 5 V/Div  
DC · AC Time/Div= 10µ S/Div



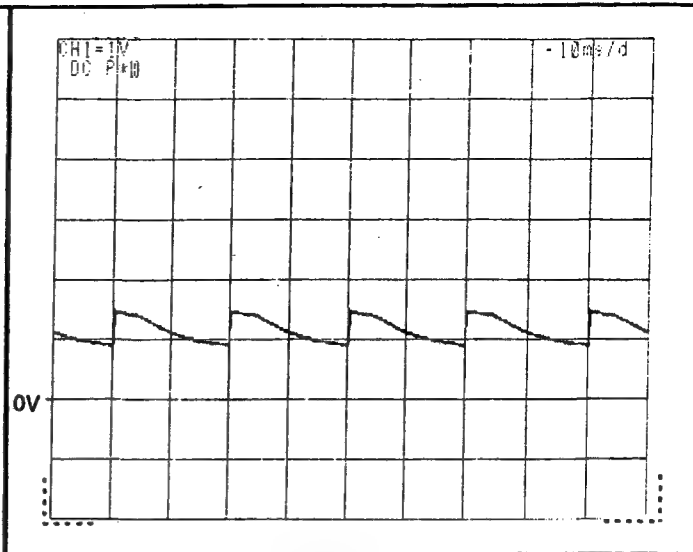
No. 131 Volt/Div= 500m V/Div  
DC · AC Time/Div= 10µ S/Div



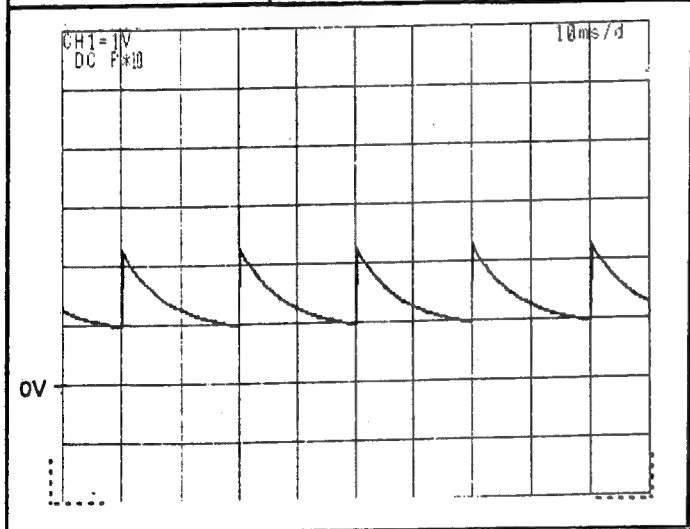
No. 132 Volt/Div= 10 V/Div  
DC · AC Time/Div= 10µ S/Div



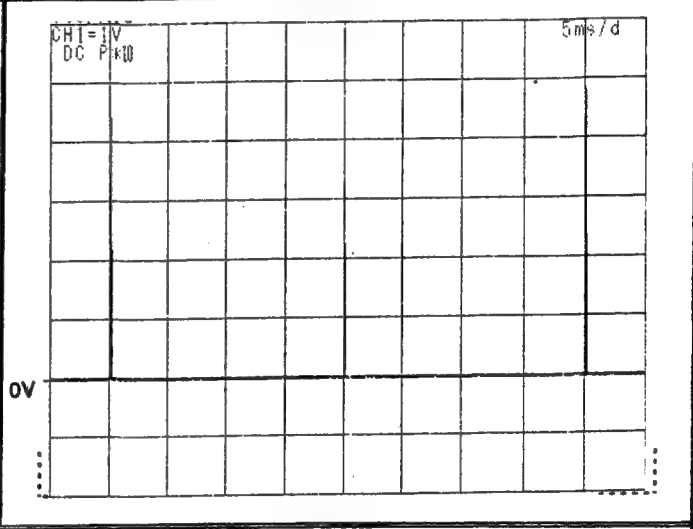
No. 133	Volt/Div= 1 V/Div
DC · AC	Time/Div= 10 μ S/Div



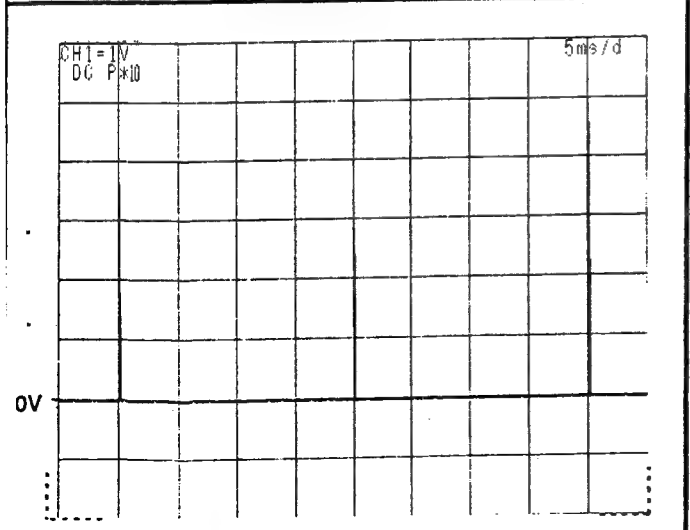
No. 134	Volt/Div= 1 V/Div
DC · AC	Time/Div= 10 m S/Div



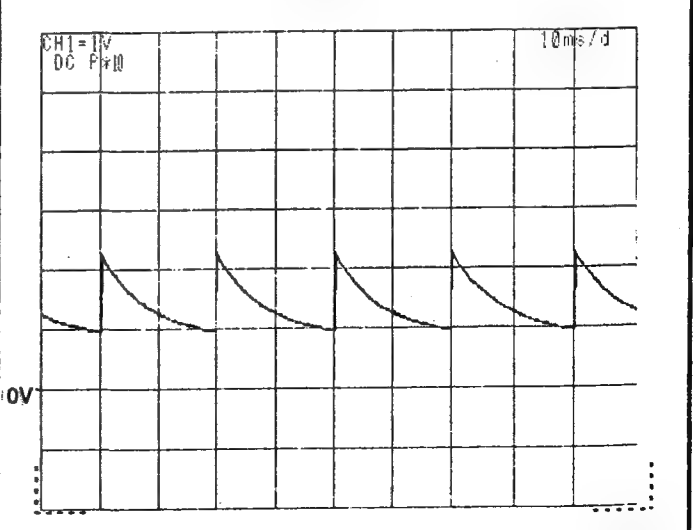
No. 135	Volt/Div= 1 V/Div
DC · AC	Time/Div= 10 m S/Div



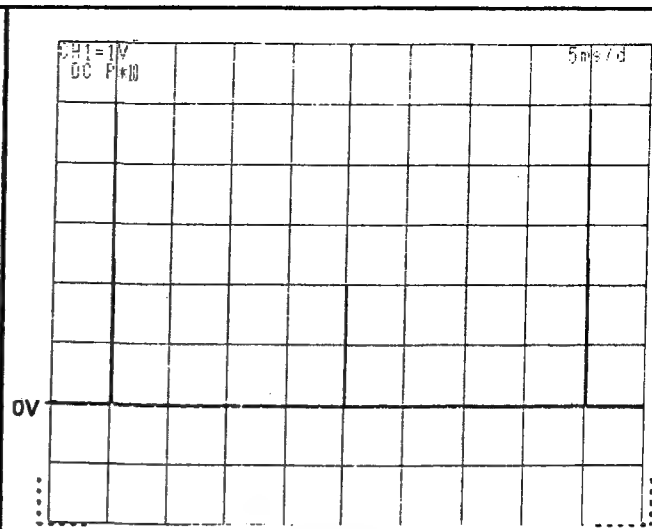
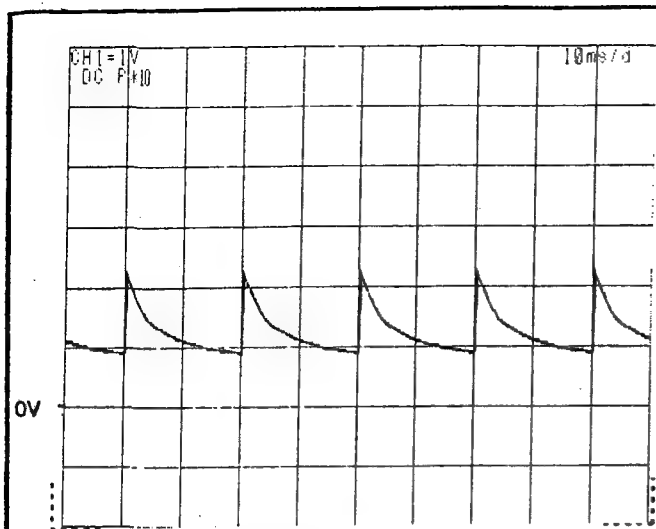
No. 136	Volt/Div= 1 V/Div
DC · AC	Time/Div= 5 m S/Div



No. 137	Volt/Div= 1 V/Div
DC · AC	Time/Div= 5 m S/Div



No. 138	Volt/Div= 1 V/Div
DC · AC	Time/Div= 10 m S/Div

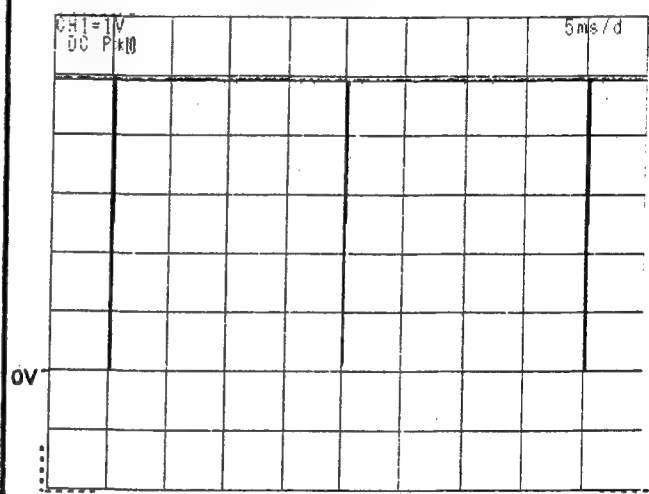
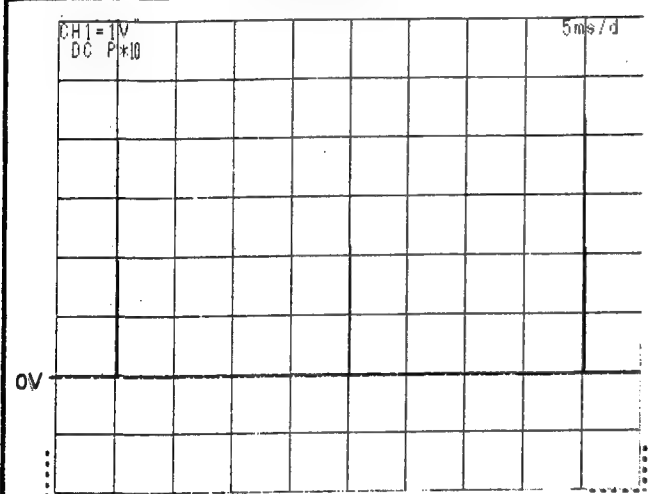


No. 139 Volt/Div= 1 V/Div

DC · AC Time/Div= 10m S/Div

No. 140 Volt/Div= 1 V/Div

DC · AC Time/Div= 5m S/Div

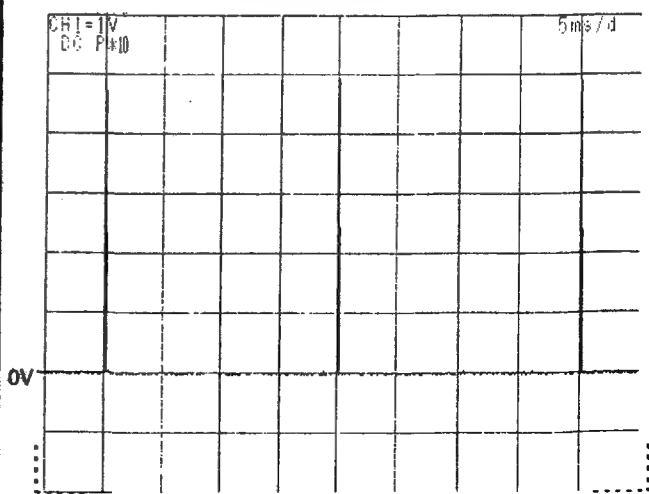
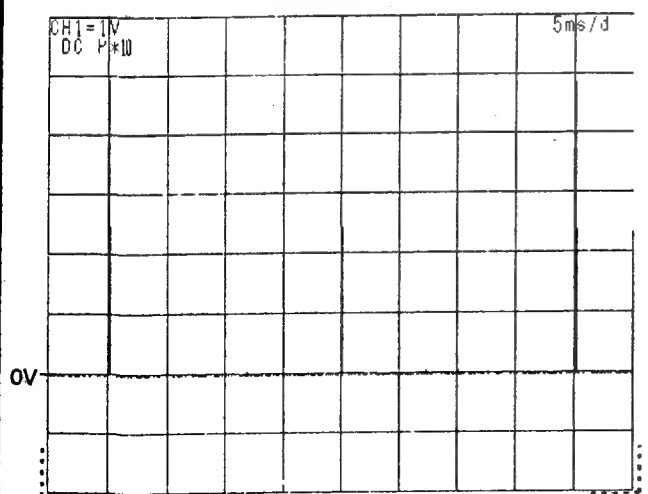


No. 141 Volt/Div= 1 V/Div

DC · AC Time/Div= 5m S/Div

No. 142 Volt/Div= 1 V/Div

DC · AC Time/Div= 5m S/Div

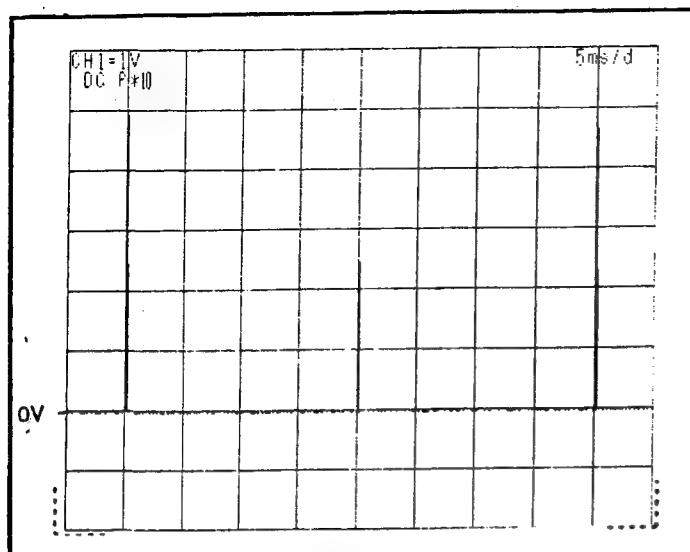


No. 143 Volt/Div= 1 V/Div

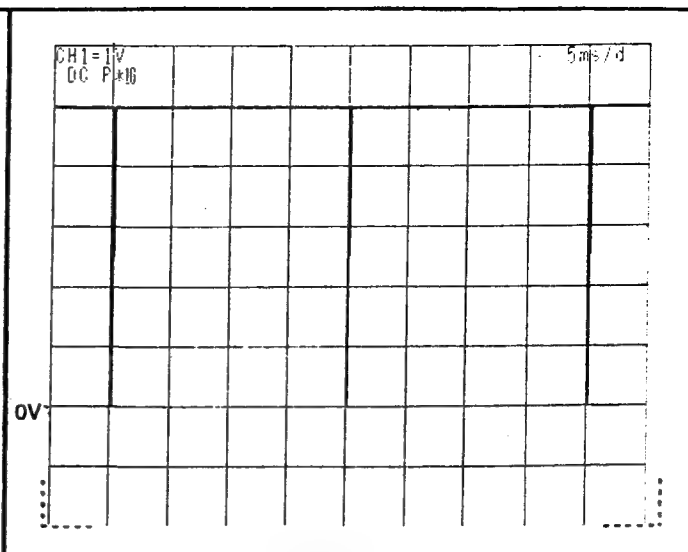
DC · AC Time/Div= 5m S/Div

No. 144 Volt/Div= 1 V/Div

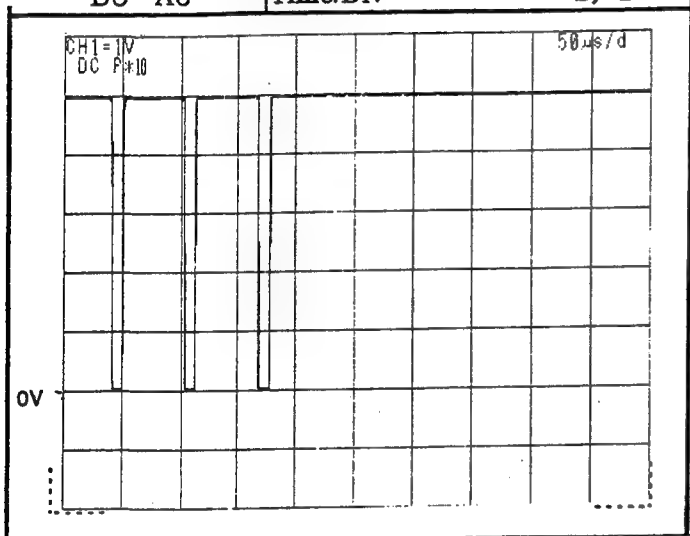
DC · AC Time/Div= 5m S/Div



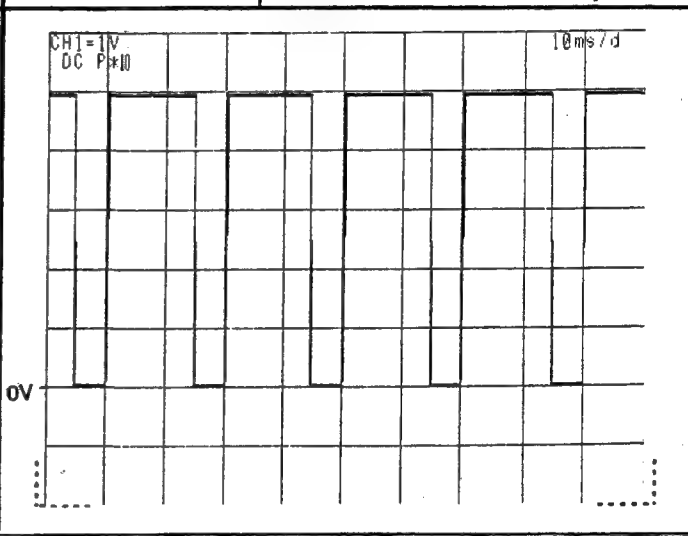
No. 145      Volt/Div= 1 V/Div  
DC · AC      Time/Div= 5m S/Div



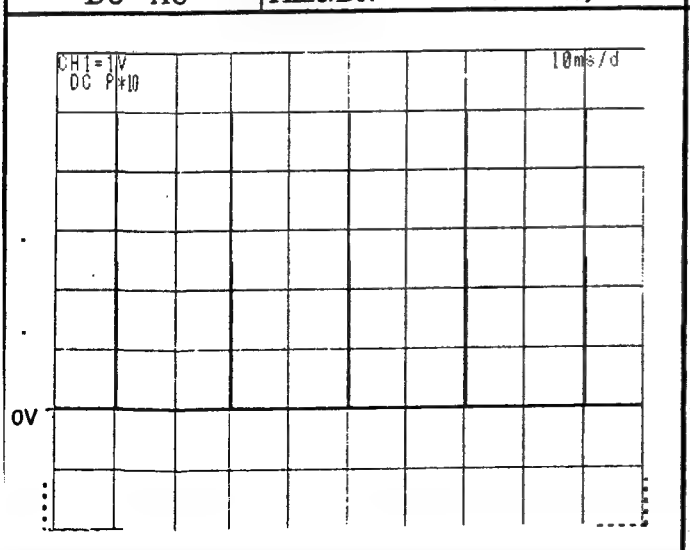
No. 146      Volt/Div= 1 V/Div  
DC · AC      Time/Div= 5m S/Div



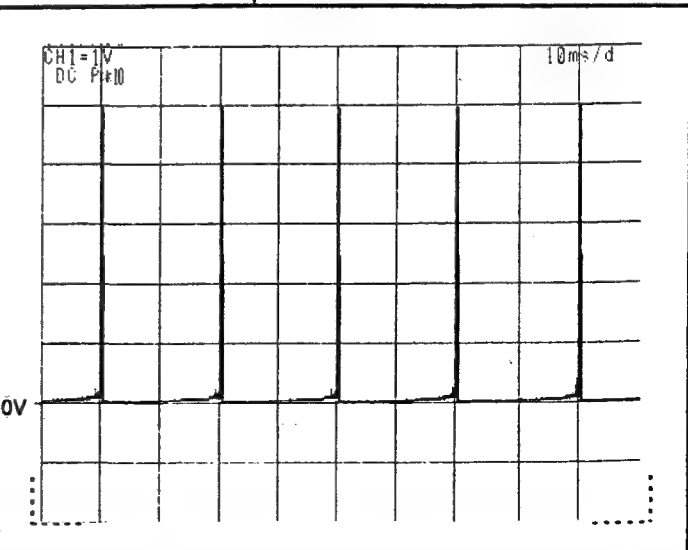
No. 147      Volt/Div= 1 V/Div  
DC · AC      Time/Div= 50μ S/Div



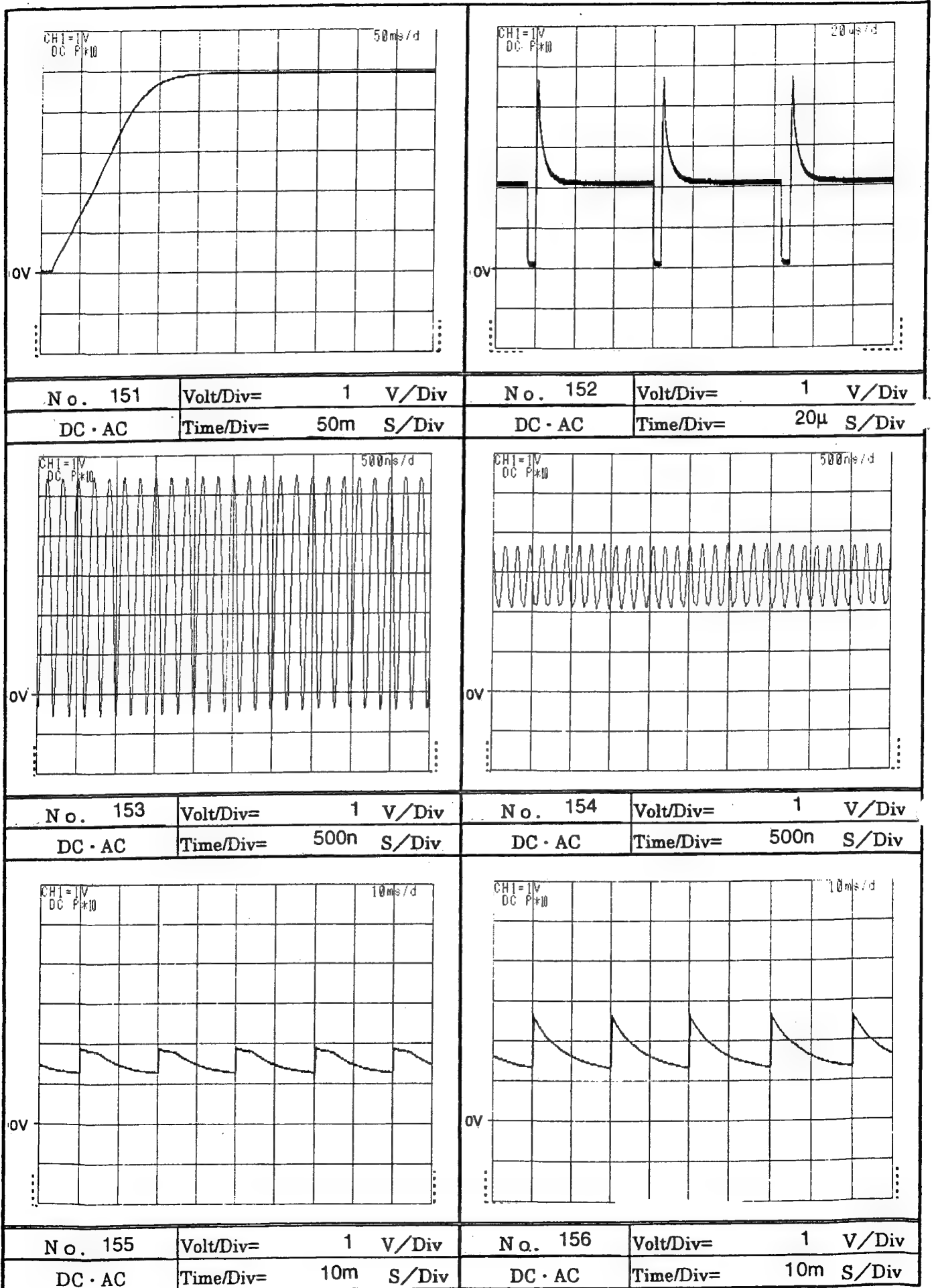
No. 148      Volt/Div= 1 V/Div  
DC · AC      Time/Div= 10m S/Div



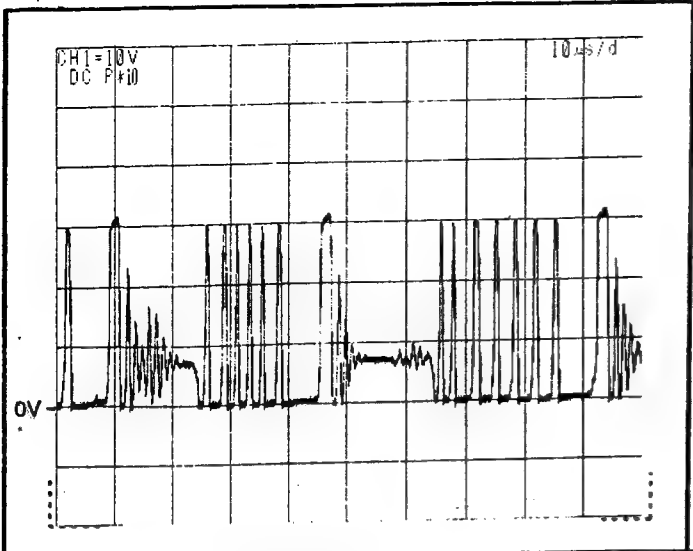
No. 149      Volt/Div= 1 V/Div  
DC · AC      Time/Div= 10m S/Div



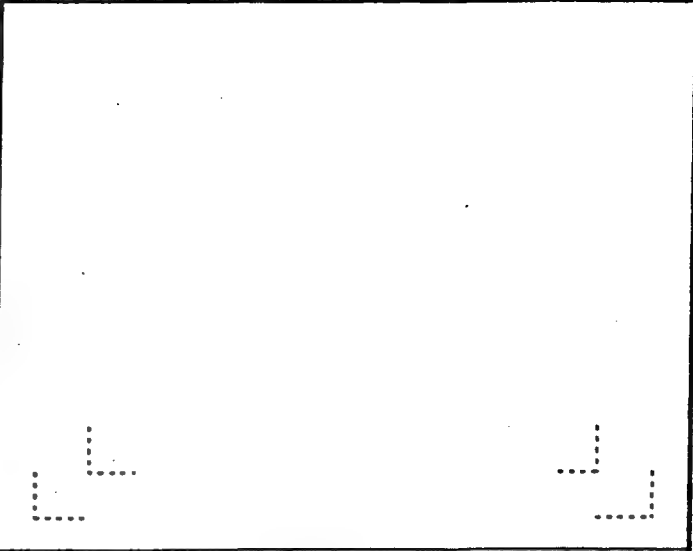
No. 150      Volt/Div= 1 V/Div  
DC · AC      Time/Div= 10m S/Div



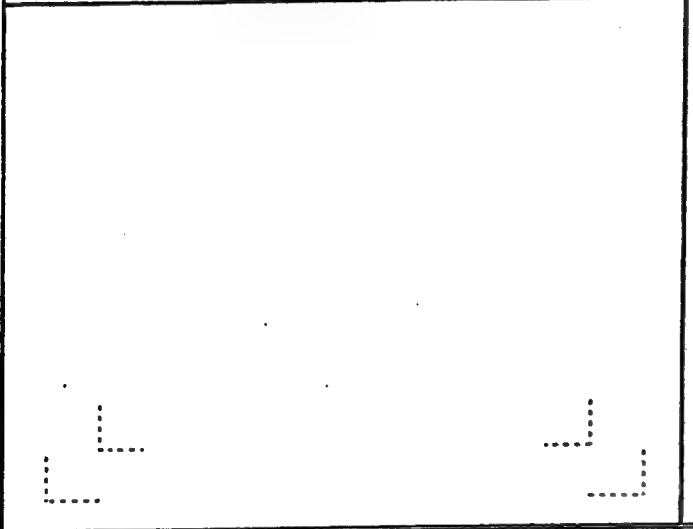




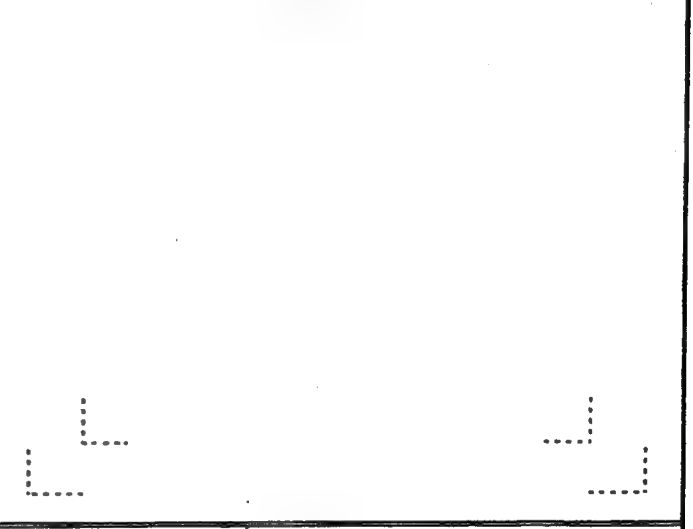
No. 157	Volt/Div= 10 V/Div
DC · AC	Time/Div= 10μ S/Div



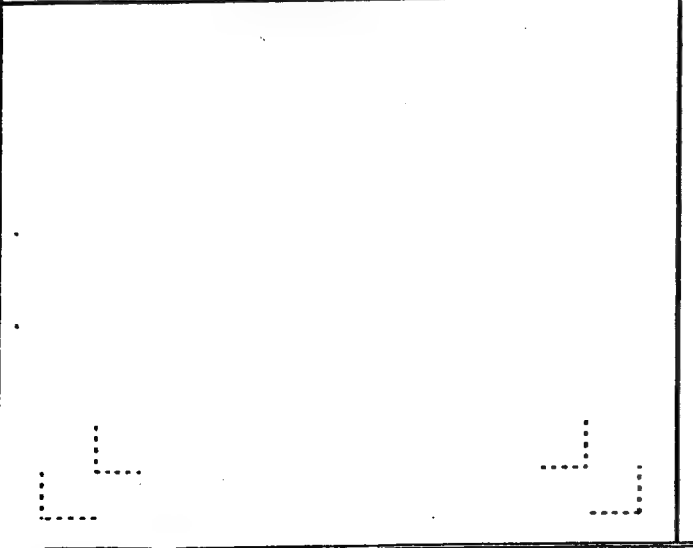
No.	Volt/Div= V/Div
DC · AC	Time/Div= S/Div



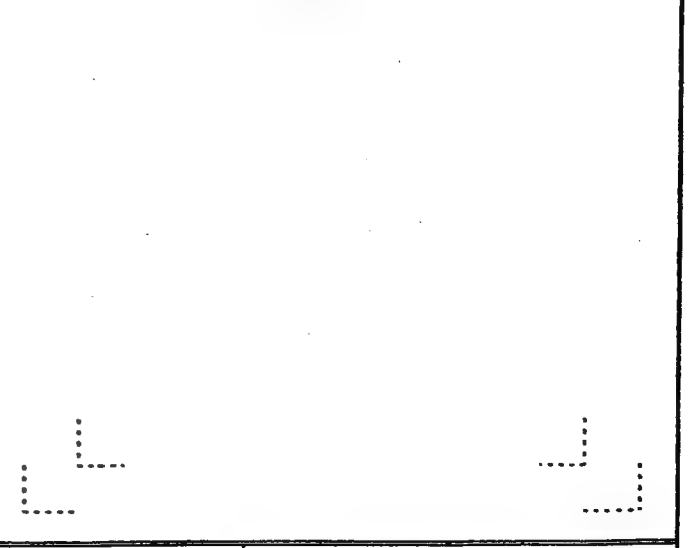
No.	Volt/Div= V/Div
DC · AC	Time/Div= S/Div



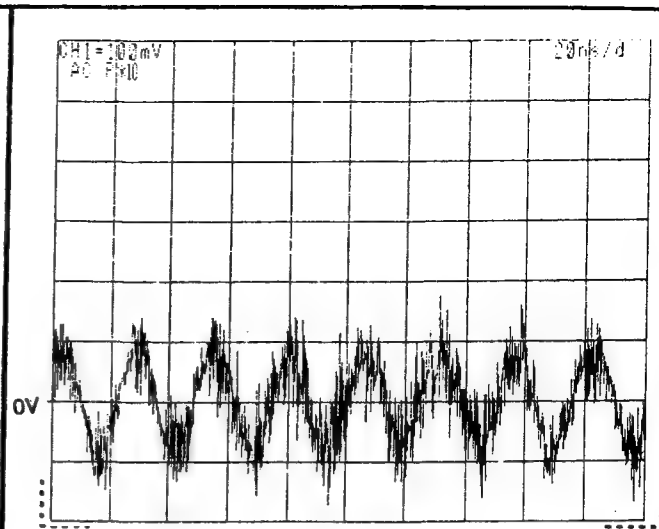
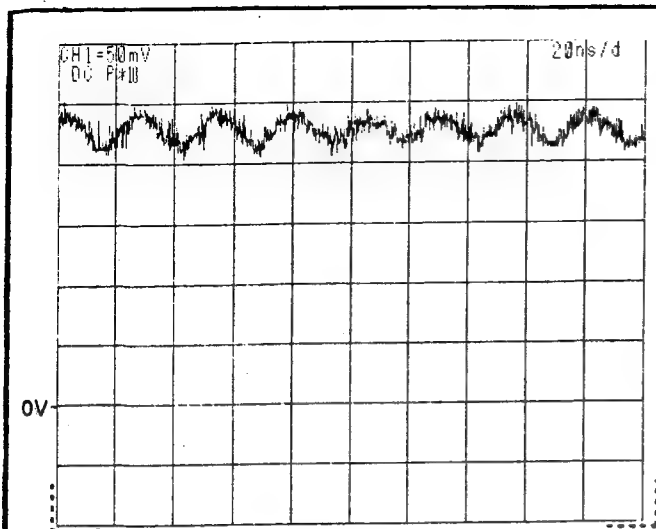
No.	Volt/Div= V/Div
DC · AC	Time/Div= S/Div



No.	Volt/Div= V/Div
DC · AC	Time/Div= S/Div



No.	Volt/Div= V/Div
DC · AC	Time/Div= S/Div

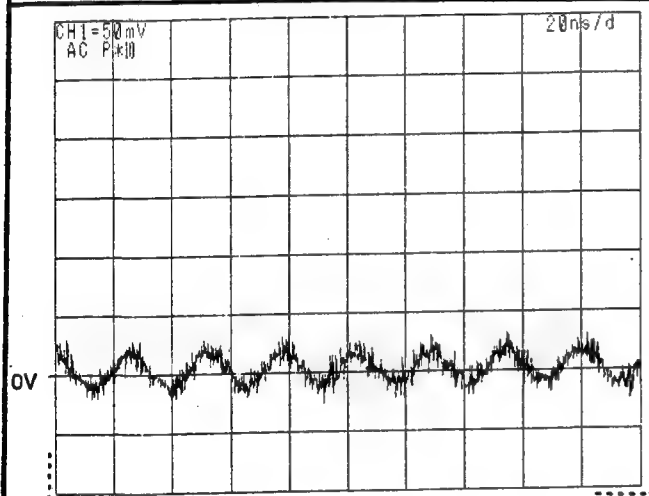


No. 158 Volt/Div= 50m V/Div

DC · AC Time/Div= 20n S/Div

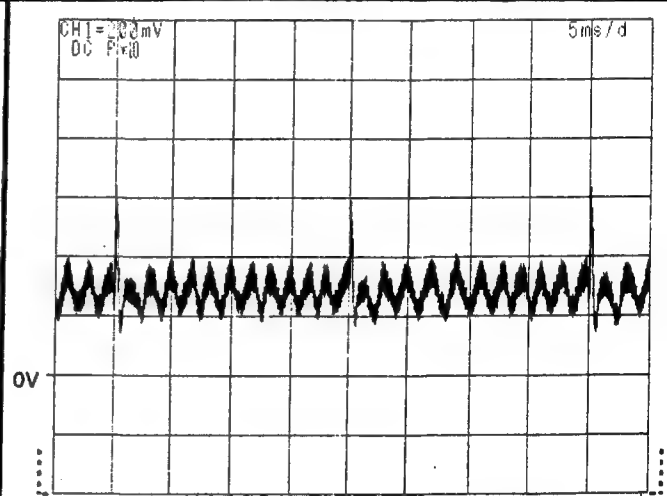
No. 159 Volt/Div= 100m V/Div

DC · AC Time/Div= 20n S/Div



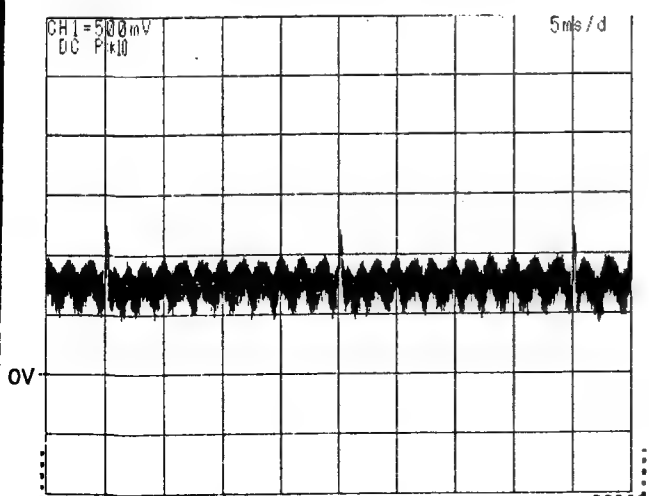
No. 160 Volt/Div= 50m V/Div

DC · AC Time/Div= 20n S/Div



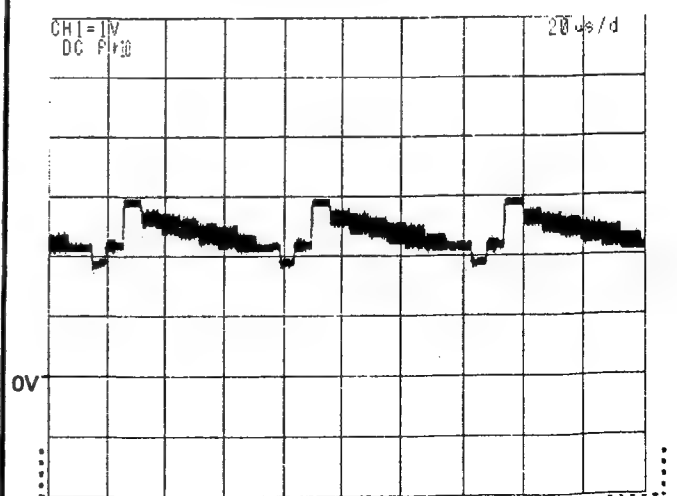
No. 161 Volt/Div= 200m V/Div

DC · AC Time/Div= 5m S/Div



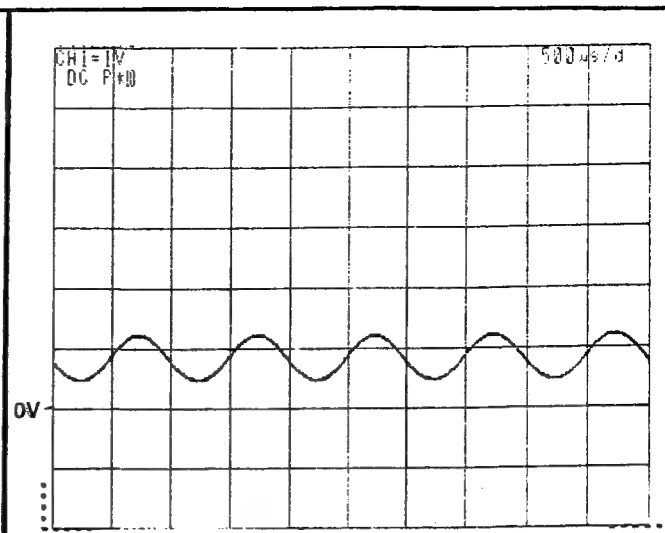
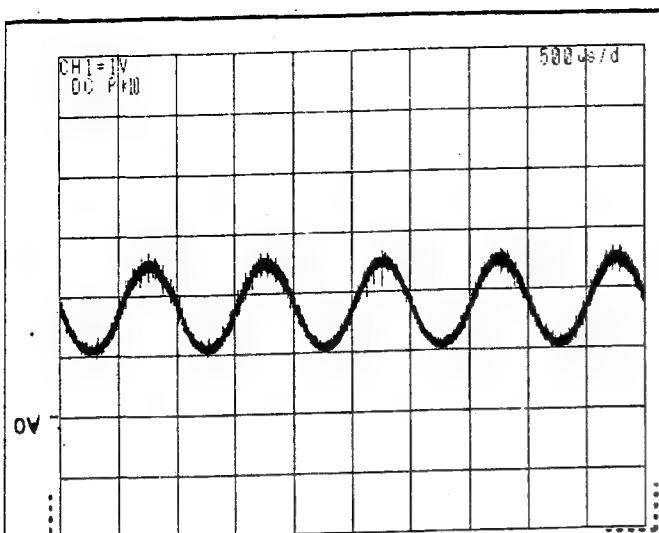
No. 162 Volt/Div= 500m V/Div

DC · AC Time/Div= 5m S/Div



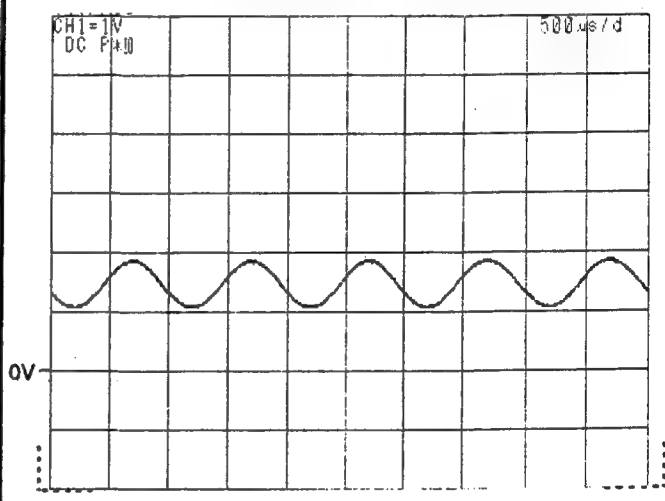
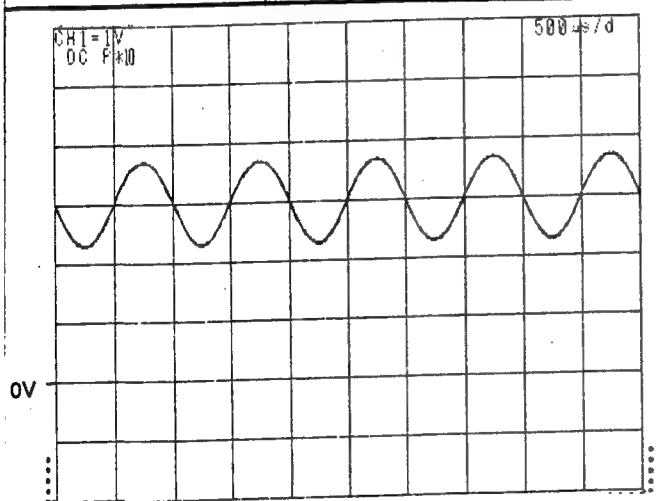
No. 163 Volt/Div= 1 V/Div

DC · AC Time/Div= 20μ S/Div



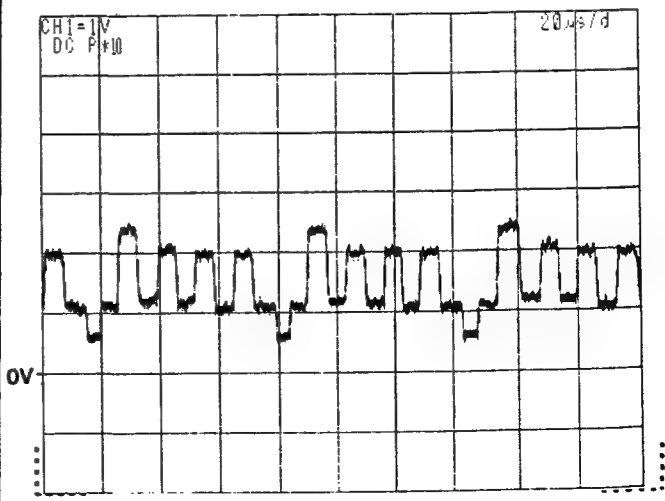
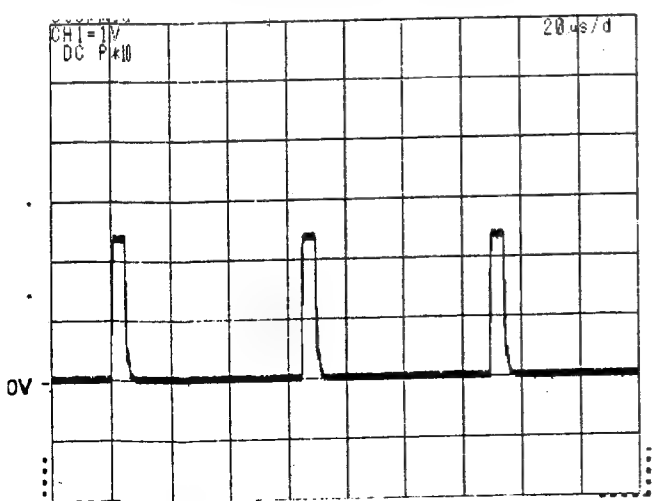
No. 164	Volt/Div= 1 V/Div
DC · AC	Time/Div= 500μ S/Div

No. 165	Volt/Div= 1 V/Div
DC · AC	Time/Div= 500μ S/Div



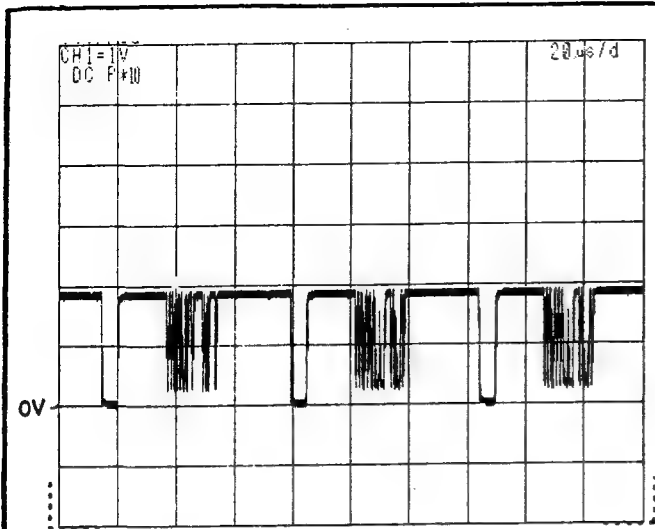
No. 166	Volt/Div= 1 V/Div
DC · AC	Time/Div= 500μ S/Div

No. 167	Volt/Div= 1 V/Div
DC · AC	Time/Div= 500μ S/Div

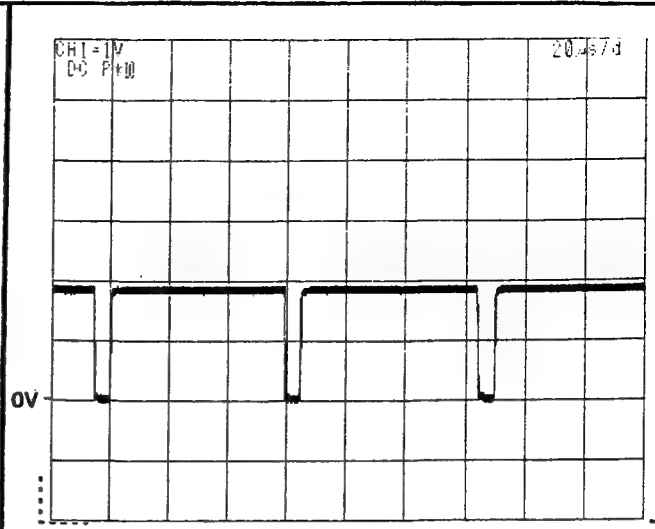


No. 168	Volt/Div= 1 V/Div
DC · AC	Time/Div= 20μ S/Div

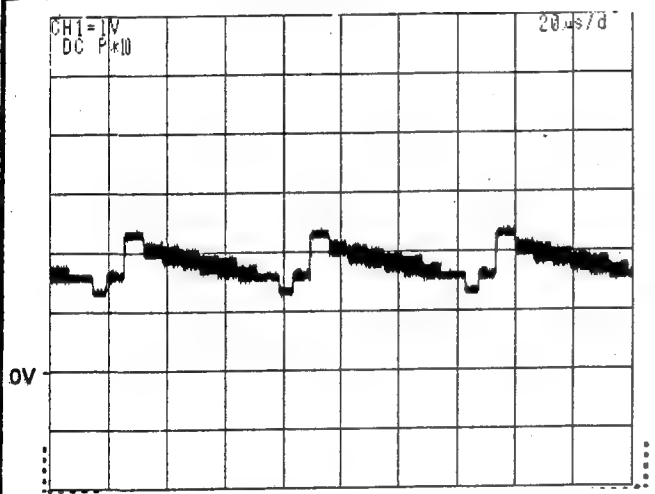
No. 169	Volt/Div= 1 V/Div
DC · AC	Time/Div= 20μ S/Div



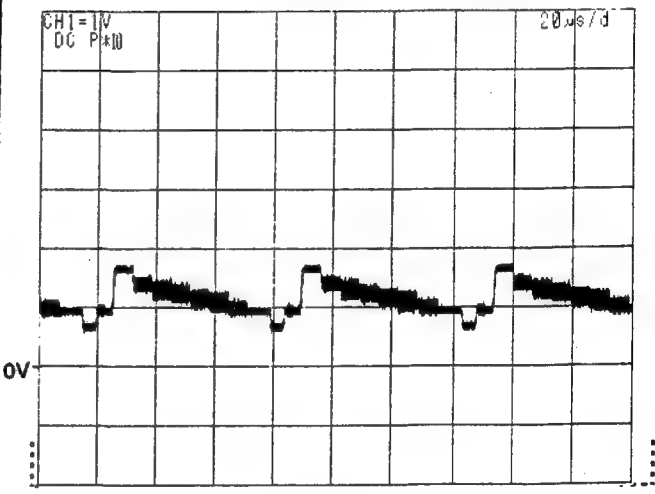
No. 170	Volt/Div= 1 V/Div
DC · AC	Time/Div= 20μ S/Div



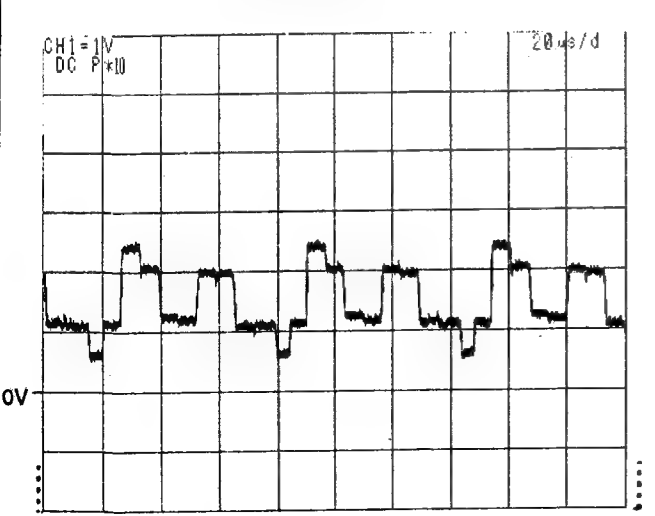
No. 171	Volt/Div= 1 V/Div
DC · AC	Time/Div= 20μ S/Div



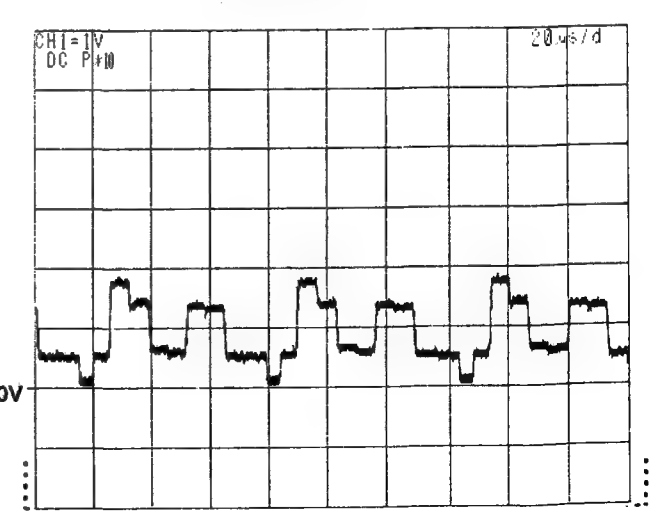
No. 172	Volt/Div= 1 V/Div
DC · AC	Time/Div= 20μ S/Div



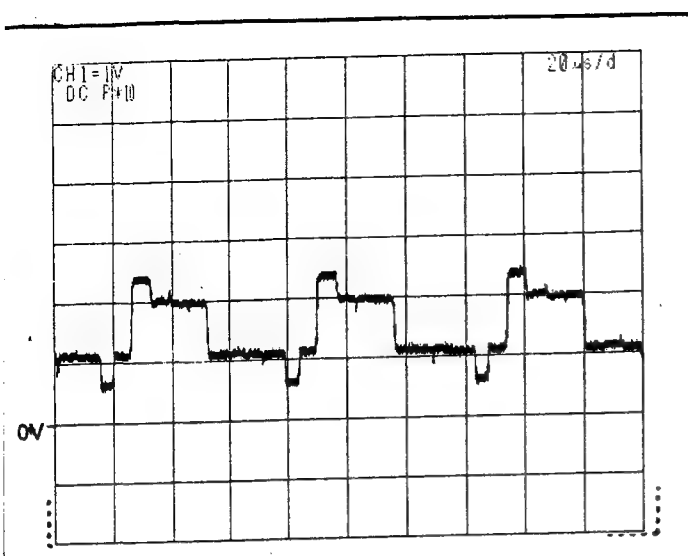
No. 173	Volt/Div= 1 V/Div
DC · AC	Time/Div= 20μ S/Div



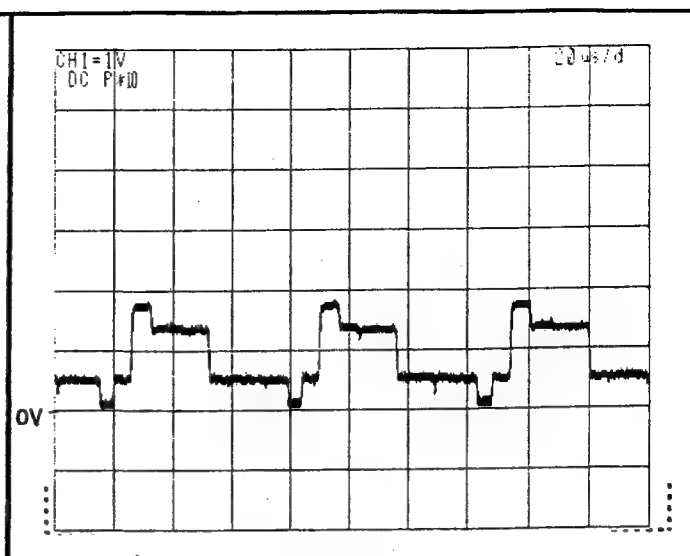
No. 174	Volt/Div= 1 V/Div
DC · AC	Time/Div= 20μ S/Div



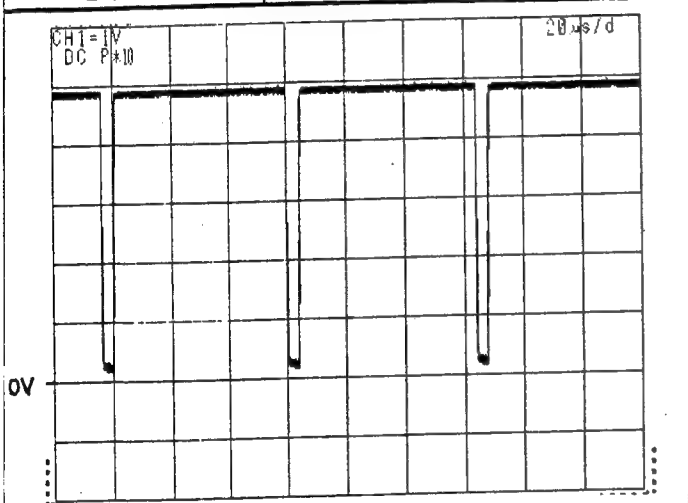
No. 175	Volt/Div= 1 V/Div
DC · AC	Time/Div= 20μ S/Div



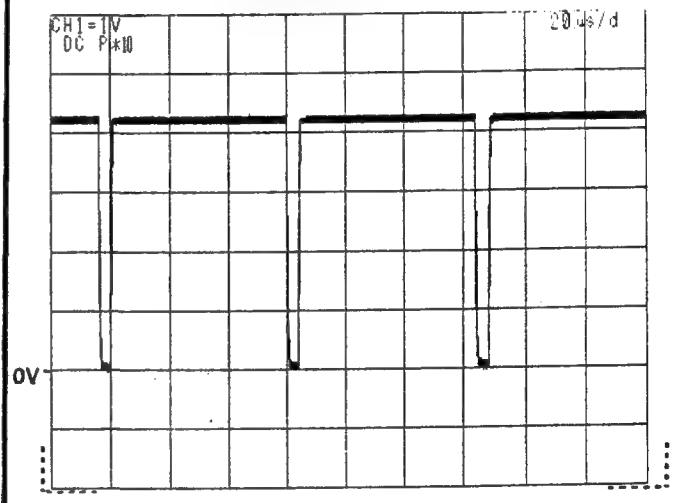
N o. 176	Volt/Div= 1	V/Div
DC · AC	Time/Div= 20µ	S/Div



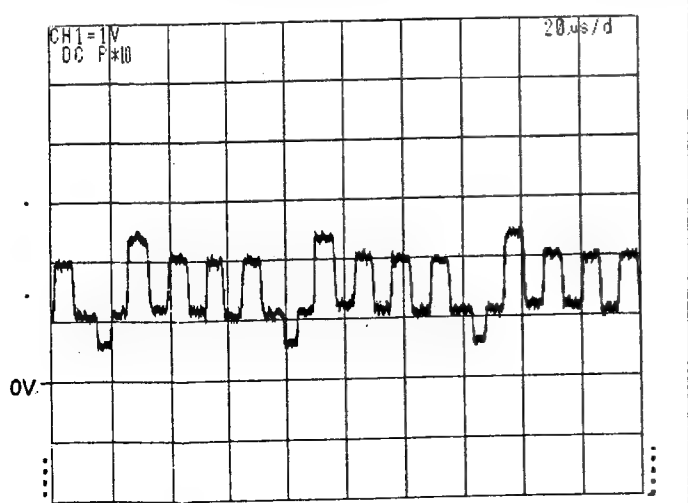
N o. 177	Volt/Div= 1	V/Div
DC · AC	Time/Div= 20µ	S/Div



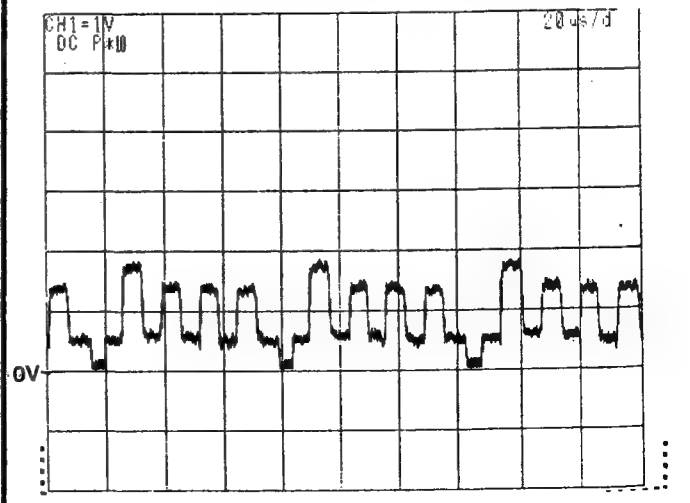
N o. 178	Volt/Div= 1	V/Div
DC · AC	Time/Div= 20µ	S/Div



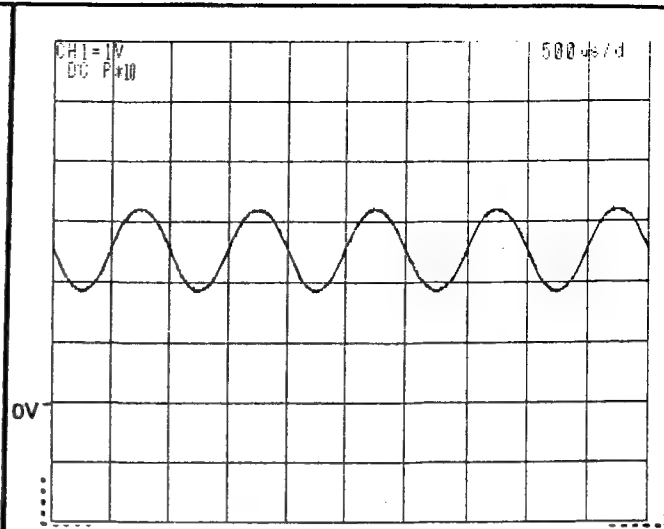
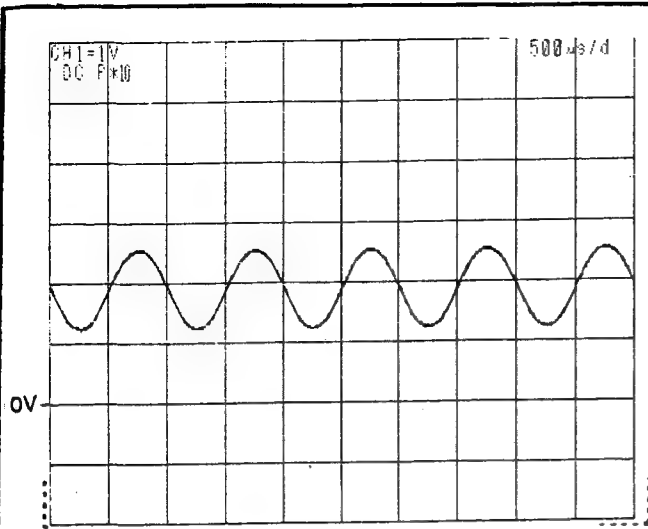
N o. 179	Volt/Div= 1	V/Div
DC · AC	Time/Div= 20µ	S/Div



N o. 180	Volt/Div= 1	V/Div
DC · AC	Time/Div= 20µ	S/Div

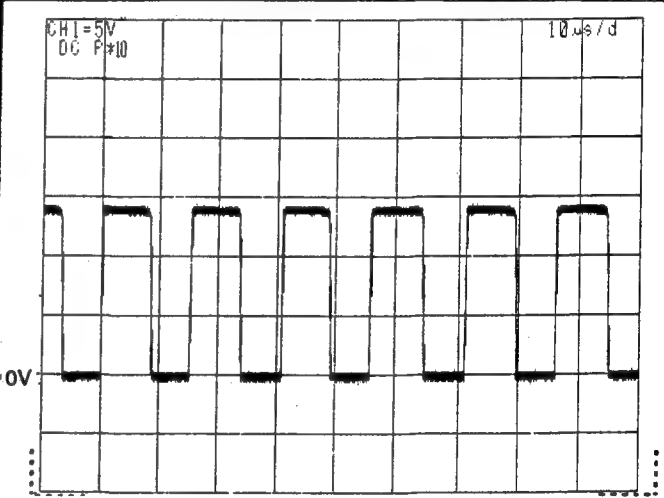
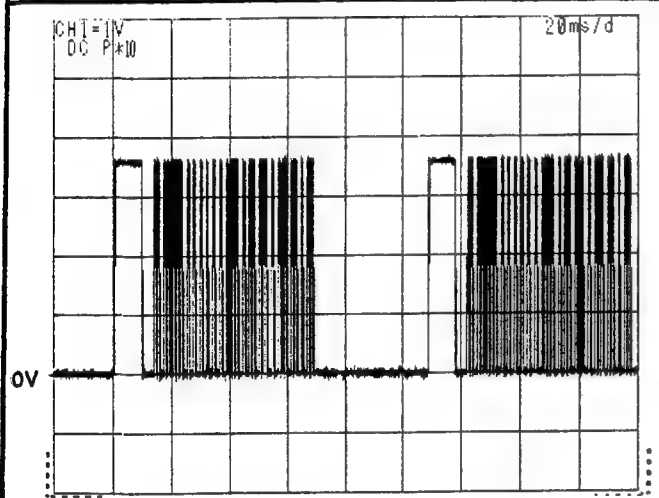


N o. 181	Volt/Div= 1	V/Div
DC · AC	Time/Div= 20µ	S/Div



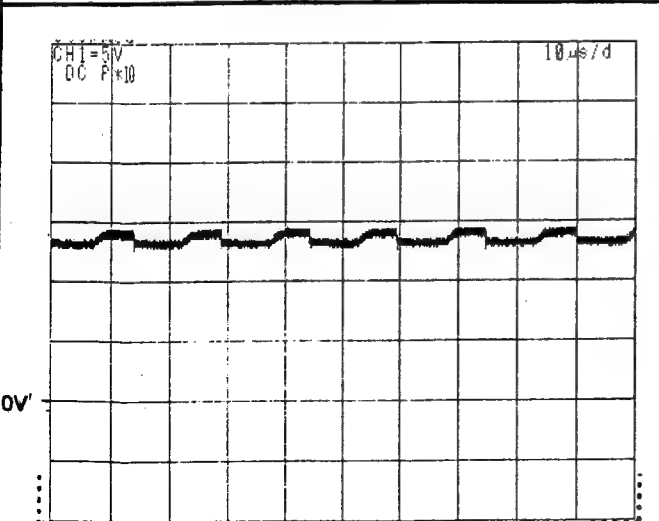
No. 182	Volt/Div= 1 V/Div
DC · AC	Time/Div= 500 $\mu$ S/Div

No. 183	Volt/Div= 1 V/Div
DC · AC	Time/Div= 500 $\mu$ S/Div



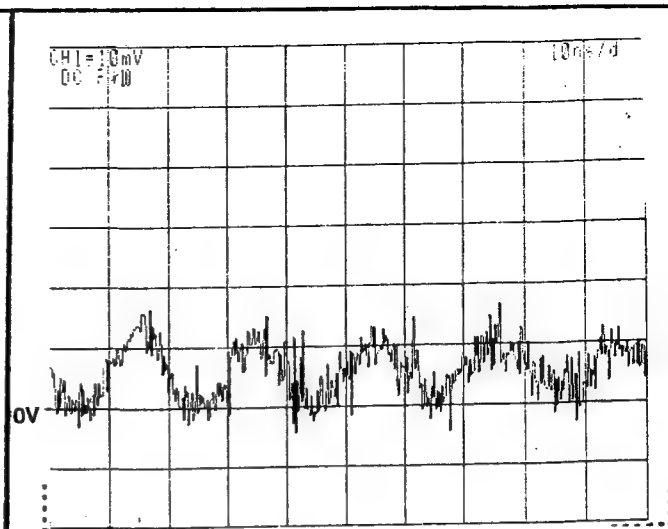
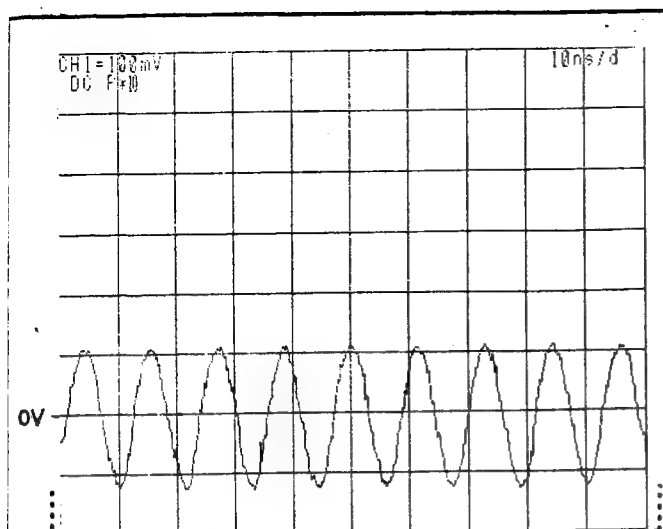
No. 184	Volt/Div= 1 V/Div
DC · AC	Time/Div= 20m S/Div

No. 185	Volt/Div= 5 V/Div
DC · AC	Time/Div= 10 $\mu$ S/Div



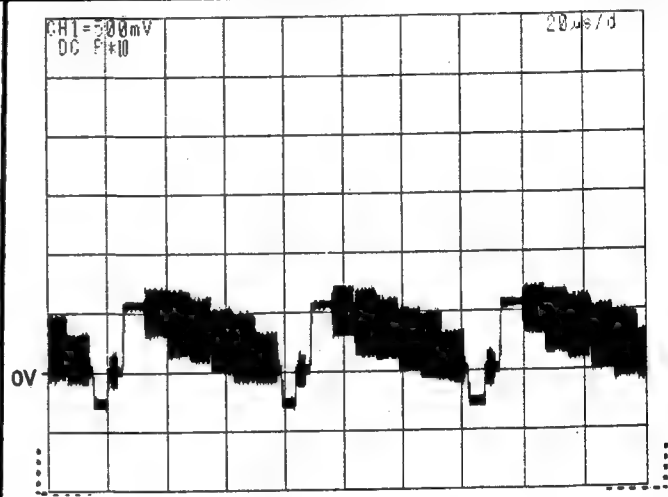
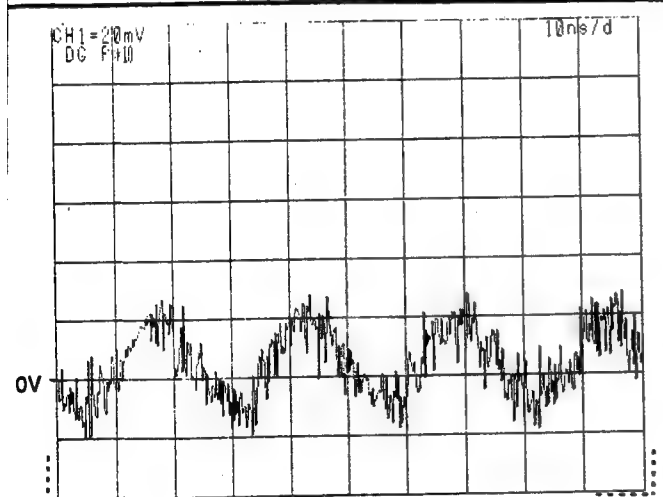
No. 186	Volt/Div= 5 V/Div
DC · AC	Time/Div= 10 $\mu$ S/Div

No. 187	Volt/Div= 1 V/Div
DC · AC	Time/Div= 20m S/Div



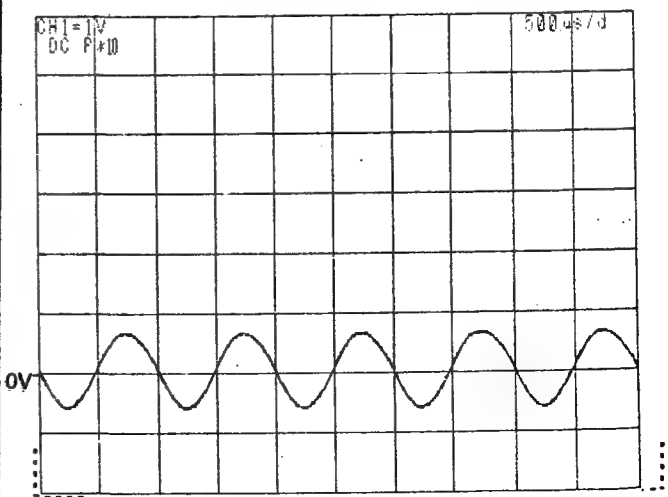
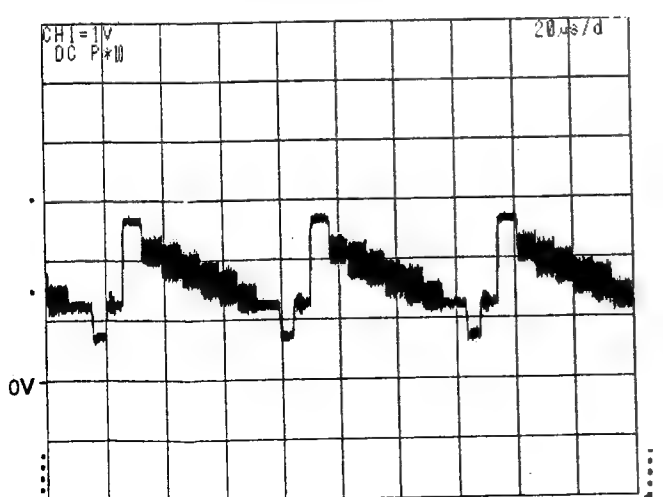
N o. 188	Volt/Div= 100m	V/Div
DC · AC	Time/Div= 10n	S/Div

N o. 189	Volt/Div= 10m	V/Div
DC · AC	Time/Div= 10n	S/Div



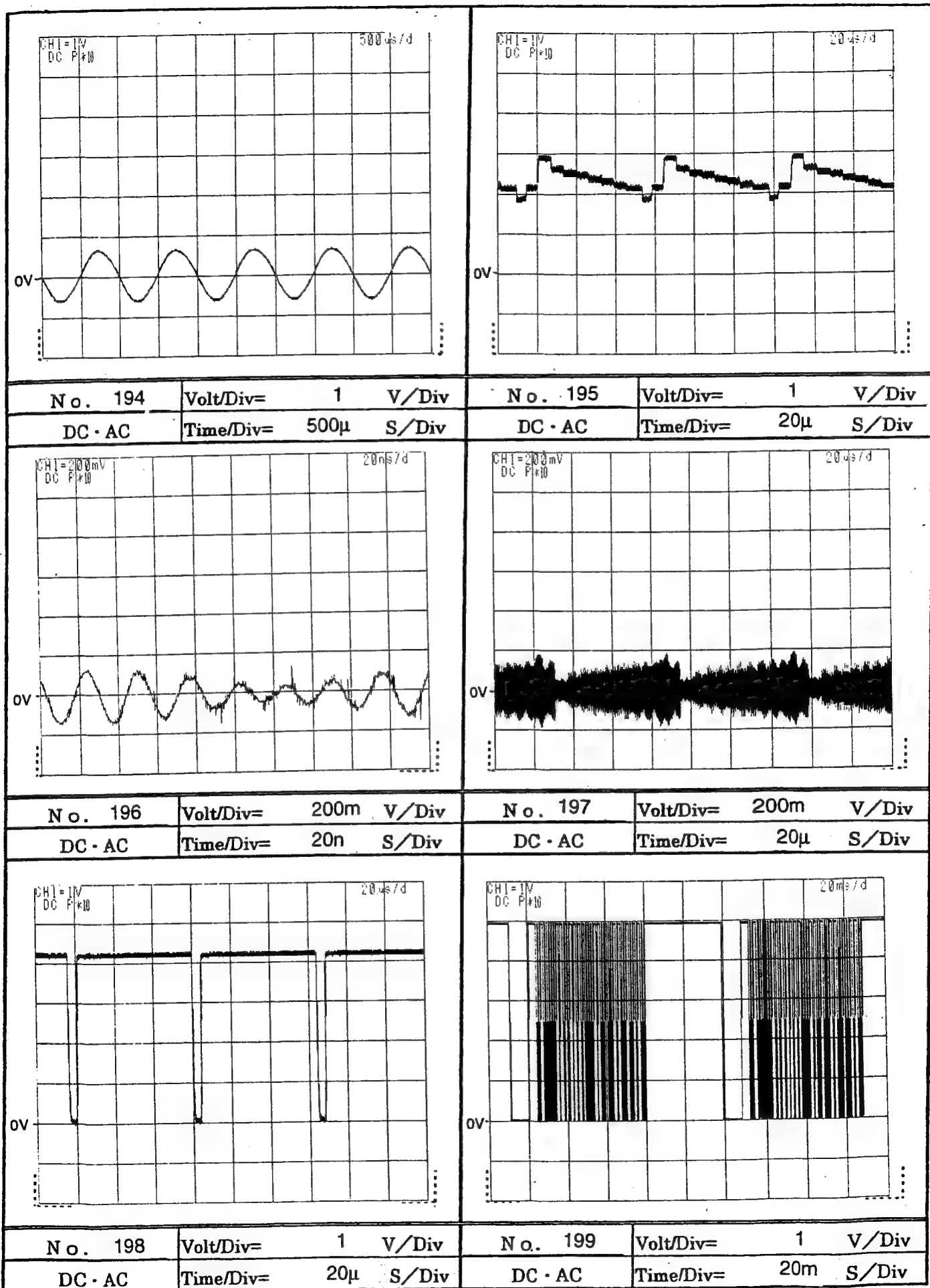
N o. 190	Volt/Div= 20m	V/Div
DC · AC	Time/Div= 10n	S/Div

N o. 191	Volt/Div= 500m	V/Div
DC · AC	Time/Div= 20μ	S/Div

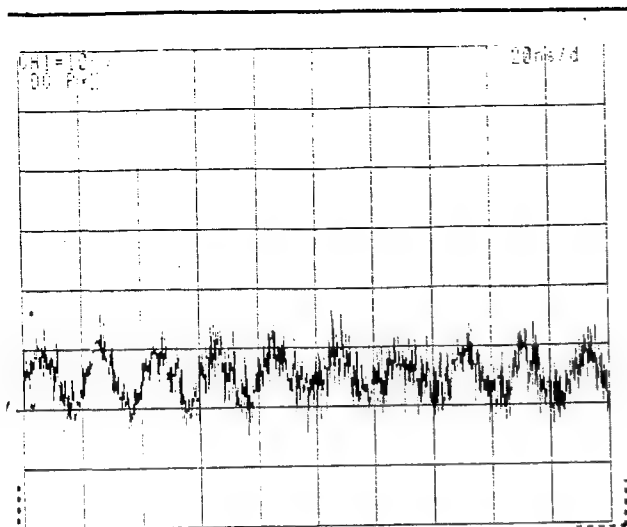


N o. 192	Volt/Div= 1	V/Div
DC · AC	Time/Div= 20μ	S/Div

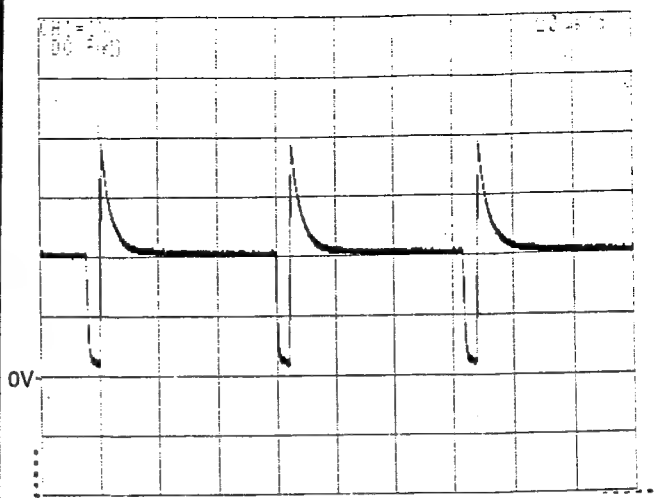
N o. 193	Volt/Div= 1	V/Div
DC · AC	Time/Div= 500μ	S/Div







No. 200	Volt/Div= 10m	V/Div
DC · AC	Time/Div= 20n	S/Div



No. 201	Volt/Div= 1	V/Div
DC · AC	Time/Div= 20μ	S/Div

No.	Volt/Div=	V/Div
DC · AC	Time/Div=	S/Div

No.	Volt/Div=	V/Div
DC · AC	Time/Div=	S/Div

No.	Volt/Div=	V/Div
DC · AC	Time/Div=	S/Div

No.	Volt/Div=	V/Div
DC · AC	Time/Div=	S/Div

# Electrical Parts List

Resistor : Carbon resistors under 1/4 watts are not mentioned in the parts list, please confirm them by schematic diagram.

Capacitor :  $\mu$ F=microfarads,pF=picofarads

Abbreviations			Symbol No.	Part No.	Description
RES.= Resistor	CAP.= Capacitor		<b>Transistors</b>		
C.F.= Carbon Film	ELY.= Electrolytic		Q100	48E24272S01	CP., UN2111
M.F.= Metal Film	CER.= Ceramic		Q101	48E24272S01	CP., UN2111
M.O.= Metal Oxide Film	MYL.= Mylar		Q102	48E24272S01	CP., UN2111
M.P.= Metal Plate	TAN.= Tantalum		Q103	48E24275S01	CP., 2SC3082K
TR. = Transistor	POLY.= Polystyrol		Q104	48E24274S01	CP., 2SD601A
TRANS.= Transformer	PP. = Polypropylene		Q105	48E24270S01	CP., UN2213
CP. = Chip	PLT.= Polyethylene		Q106	48E24274S01	CP., 2SD601A
	PF. = Polyester Film		Q107	48E24274S01	CP., 2SD601A
<b>Symbol No. Part No. Description</b>			Q108	48E24274S01	CP., 2SD601A
<b>Tuner P.W.Board</b>			Q109	48E24270S01	CP., UN2213
<b>IC's</b>			Q200	48E24270S01	CP., UN2213
IC100	51E26752S01	TC4W53F	Q201	48E24270S01	CP., UN2213
IC101	51E24244S01	M51348FP	Q202	48E24279S01	CP., XN1211
IC102	51E24254S01	TC4S66F	Q203	48E24276S01	CP., DTC123EK
IC103	51E24975S01	NJM2534M	Q204	48E26767S01	CP., 2SA1037K
IC104	51E26749S01	NJM2535M	Q205	48E24278S01	CP., XN4501
IC105	51E24236S01	MM1113XF	Q206	48E24270S01	CP., UN2213
IC106	51E24236S01	MM1113XF	Q207	48E24278S01	CP., XN4501
IC107	51E24251S01	MM1031XM	Q208	48E24274S01	CP., 2SD601A
IC108	51E24249S01	NJU4066BM	Q400	48E24274S01	CP., 2SD601A
IC109	51E24236S01	MM1113XF	Q401	48E24270S01	CP., UN2213
IC110	51E24236S01	MM1113XF	Q402	48E24274S01	CP., 2SD601A
IC111	51E24249S01	NJU4066BM	Q403	48E24270S01	CP., UN2213
IC112	51E26751S01	KIA324F	Q500	48E24272S01	CP., UN2111
IC113	51E24236S01	MM1113XF	Q501	48E24269S01	CP., 2SB1204
IC114	51E24236S01	MM1113XF	Q502	48E24271S01	CP., UN2211
IC200	51E24249S01	NJU4066BM	Q503	48E24274S01	CP., 2SD601A
IC201	51E26748S01	TC7S86F	Q504	48E24269S01	CP., 2SB1204
IC202	51E26195S01	MM1234XF	Q505	48E24274S01	CP., 2SD601A
IC203	51E26753S01	$\mu$ PC1830GT	Q506	48E24268S01	CP., 2SB952A
IC204	51E24249S01	NJU4066BM	Q507	48E26768S01	CP., UN2212
IC400	51E24247S01	DN8506S	Q508	48E24270S01	CP., UN2213
IC401	51E26750S01	KIA358F	Q509	48E24270S01	CP., UN2213
IC402	51E26790S01	EV9710FA	<b>Diodes</b>		
IC403	51E26755S01	X24C01S	D100	48E24504S01	CP., MA142WK
IC404	51E24248S01	M51943AML	D201	48E24504S01	CP., MA142WK
IC500	51E26750S01	KIA358F	D400	48E24504S01	CP., MA142WK
IC501	51E24250S01	M5291FP	D401	48E24504S01	CP., MA142WK
IC502	51E24242S01	KIA78L05F	D402	48E24504S01	CP., MA142WK
IC503	51E24240S01	KIA7805PI	D500	48E26770S01	CP., KDS226
IC504	51E24237S01	TK11818M	D501	48E24988S01	CP., SB30-03T-TL
IC700	51E24234S01	$\mu$ PD74HC4066G	D502	48E24504S01	CP., MA142WK
IC701	51E26754S01	EV9712AB			
IC702	51E24241S01	KIA339F			

Symbol No.	Part No.	Description
D503	48E26770S01	CP., KDS226
D700	48E24987S01	CP., MA77
D701	48E24987S01	CP., MA77
D702	48E24987S01	CP., MA77
D703	48E24987S01	CP., MA77
D704	48E24611S01	CP., MA142WA
D705	48E24611S01	CP., MA142WA
ZD200	48E24508S01	Zener, CP. MA3075-H
ZD201	48E24508S01	Zener, CP. MA3075-H
ZD202	48E24508S01	Zener, CP. MA3075-H
ZD203	48E24508S01	Zener, CP. MA3075-H
ZD204	48E24508S01	Zener, CP. MA3075-H
ZD205	48E24508S01	Zener, CP. MA3075-H
ZD207	48E24508S01	Zener, CP. MA3075-H
ZD208	48E24508S01	Zener, CP. MA3075-H
ZD500	48E24508S01	Zener, CP. MA3075-H
ZD502	48E24610S01	Zener, CP. MA3051-L
ZD506	48E26769S01	Zener, 6KA24L
VC700	48E25852S01	Varactor, CP. 1T363A
<b>Coils</b>		
L100	25E26003S01	Inductor, CP. 2.2μH
L102	24E24605S01	Inductor, CP. 15μH
L400	24E24605S01	Inductor, CP. 15μH
L500	24E24602S01	Inductor, 1mH
L501	24E24985S01	Inductor, 68μH
L502	24E24986S01	Inductor, 1mH
L700	25E26766S01	Inductor, CP. 27μH
L701	24E24604S01	Inductor, CP. 1μH
<b>Crystals</b>		
X200	91E26763S01	CER., CSB500F23 (500KHz)
X201	91E26764S01	TR-49 (4.43MHz)
X202	91E24598S01	HC-49/U (3.58MHz)
X400	91E24597S01	HC-49/U-S (4MHz)
<b>Filters</b>		
X100	91E26762S01	SAW, SAF38.9MZC60Z (38.9MHz)
X101	91E26760S01	SFSL5.5MDB (5.5MHz)
X102	91E26761S01	SFSL6.0MDB (6MHz)
X103	91E26756S01	CDA5.5MC30 (5.5MHz)
X104	91E26757S01	CDA6.0MC30 (6MHz)
X105	91E26758S01	TPS5.5MB (5.5MHz)
X106	91E26759S01	TPS6.0MB (6MHz)

Symbol No.	Part No.	Description
FB400	25E24596S01	CP., BLM21B751SPT
<b>Transformer</b>		
T100	25E26765S01	3002568
<b>Surge Absorbers</b>		
SA700	48E26789S01	RA-201P-V6-2
SA701	48E26789S01	RA-201P-V6-2
SA702	48E26789S01	RA-201P-V6-2
SA703	48E26789S01	RA-201P-V6-2
<b>Switches</b>		
SW400	40E24261S01	Slide, SSSS9-22N2-A-11 (VIDEO OUTPUT/INPUT)
SW401	40E24260S01	Slide, SSSS9-12N2-A-11 (COLOR CONTROL ON/OFF)
<b>Capacitors</b>		
C100	08E25044S01	CP., 0.022μF
C101	08E25044S01	CP., 0.022μF
CC101	23E25067S01	CP. ELY., 220μF / 6.3V
C102	08E26778S01	CP., 0.33μF
CC102	23E25060S01	CP. ELY., 3.3μF / 50V
C103	08E26778S01	CP., 0.33μF
CC103	23E25067S01	CP. ELY., 220μF / 6.3V
C104	08E25033S01	CP., 0.01μF
CC104	23E25060S01	CP. ELY., 3.3μF / 50V
C106	08E26204S01	CP., 0.33μF
CC106	23E25061S01	CP. ELY., 10μF / 16V
C107	08E25041S01	CP., 4700pF
CC107	23E25059S01	CP. ELY., 1μF / 50V
C108	08E24540S01	CP., 1μF
CC108	23E25111S01	CP. ELY., (B.P) 10μF / 16V
C109	08E25033S01	CP., 0.01μF
CC109	23E25067S01	CP. ELY., 220μF / 6.3V
C110	08E25055S01	CP., 1000pF
CC110	23E25064S01	CP. ELY., 47μF / 6.3V
C111	08E25033S01	CP., 0.01μF
CC111	23E25064S01	CP. ELY., 47μF / 6.3V
C112	08E26777S01	CP., 27pF
CC112	23E24673S01	CP. ELY., 100μF / 6.3V
C113	08E25033S01	CP., 0.01μF

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Symbol No.	Part No.	Description	Symbol No.	Part No.	Description
CC113	23E25061S01	CP. ELY., 10 $\mu$ F / 16V	C165	08E26204S01	CP., 0.33 $\mu$ F
C114	08E25033S01	CP., 0.01 $\mu$ F	C166	08E25038S01	CP., 0.1 $\mu$ F
C115	08E25033S01	CP., 0.01 $\mu$ F	C168	08E25038S01	CP., 0.1 $\mu$ F
C116	08E25044S01	CP., 0.022 $\mu$ F	C200	08E25045S01	CP., 68pF
C117	08E24540S01	CP., 1 $\mu$ F	CC200	23E25060S01	CP. ELY., 3.3 $\mu$ F / 50V
C118	08E26204S01	CP., 0.33 $\mu$ F	C201	08E25045S01	CP., 68pF
C119	08E26204S01	CP., 0.33 $\mu$ F	CC201	23E25067S01	CP. ELY., 220 $\mu$ F / 6.3V
C120	08E26781S01	CP., 2.2 $\mu$ F	C202	08E25045S01	CP., 68pF
C121	08E26781S01	CP., 2.2 $\mu$ F	CC202	23E25067S01	CP. ELY., 220 $\mu$ F / 6.3V
C122	08E24648S01	CP., 0.1 $\mu$ F	C203	08E26783S01	CP., 390pF
C123	08E24540S01	CP., 1 $\mu$ F	CC203	23E26786S01	CP. ELY., 4.7 $\mu$ F / 35V
C125	08E26204S01	CP., 0.33 $\mu$ F	C204	08E25033S01	CP., 0.01 $\mu$ F
C126	08E26204S01	CP., 0.33 $\mu$ F	CC204	23E25059S01	CP. ELY., 1 $\mu$ F / 50V
C127	08E26204S01	CP., 0.33 $\mu$ F	CC205	23E25060S01	CP. ELY., 3.3 $\mu$ F / 50V
C128	08E26204S01	CP., 0.33 $\mu$ F	C206	08E26779S01	CP., 270pF
C129	08E26781S01	CP., 2.2 $\mu$ F	C207	08E26779S01	CP., 270pF
C130	08E26204S01	CP., 0.33 $\mu$ F	C208	08E25036S01	CP., 4.7 $\mu$ F
C131	08E26204S01	CP., 0.33 $\mu$ F	C209	08E25036S01	CP., 4.7 $\mu$ F
C132	08E26204S01	CP., 0.33 $\mu$ F	C210	08E25036S01	CP., 4.7 $\mu$ F
C133	08E26204S01	CP., 0.33 $\mu$ F	C211	08E25041S01	CP., 4700pF
C134	08E26204S01	CP., 0.33 $\mu$ F	C212	08E26776S01	CP., 0.22 $\mu$ F
C135	08E26204S01	CP., 0.33 $\mu$ F	C213	08E24648S01	CP., 0.1 $\mu$ F
C136	08E26204S01	CP., 0.33 $\mu$ F	C214	08E26776S01	CP., 0.22 $\mu$ F
C137	08E26204S01	CP., 0.33 $\mu$ F	C215	08E25370S01	CP., 2200pF
C138	08E25033S01	CP., 0.01 $\mu$ F	C216	08E25042S01	CP., 220pF
C139	08E26204S01	CP., 0.33 $\mu$ F	C218	08E24648S01	CP., 0.1 $\mu$ F
C140	08E24648S01	CP., 0.1 $\mu$ F	C219	08E26776S01	CP., 0.22 $\mu$ F
C141	08E25052S01	CP., 10pF	C221	08E24540S01	CP., 1 $\mu$ F
C142	08E25052S01	CP., 10pF	C222	08E26776S01	CP., 0.22 $\mu$ F
C143	08E25052S01	CP., 10pF	C223	08E25055S01	CP., 1000pF
C144	08E25052S01	CP., 10pF	C225	08E25033S01	CP., 0.01 $\mu$ F
C145	08E26204S01	CP., 0.33 $\mu$ F	C226	08E25046S01	CP., 15pF
C146	08E26781S01	CP., 2.2 $\mu$ F	C227	08E24648S01	CP., 0.1 $\mu$ F
C147	08E25052S01	CP., 10pF	C228	08E25046S01	CP., 15pF
C148	08E25052S01	CP., 10pF	C229	08E24648S01	CP., 0.1 $\mu$ F
C149	08E25052S01	CP., 10pF	C230	08E25033S01	CP., 0.01 $\mu$ F
C150	08E25052S01	CP., 10pF	C231	08E25033S01	CP., 0.01 $\mu$ F
C151	08E26781S01	CP., 2.2 $\mu$ F	C232	08E25033S01	CP., 0.01 $\mu$ F
C152	08E24540S01	CP., 1 $\mu$ F	C233	08E24648S01	CP., 0.1 $\mu$ F
C153	08E26204S01	CP., 0.33 $\mu$ F	C400	08E24540S01	CP., 1 $\mu$ F
C154	08E26204S01	CP., 0.33 $\mu$ F	CC400	23E25063S01	CP. ELY., 22 $\mu$ F / 6.3V
C155	08E26204S01	CP., 0.33 $\mu$ F	C401	08E25041S01	CP., 4700pF
C156	08E26204S01	CP., 0.33 $\mu$ F	C402	08E25055S01	CP., 1000pF
C157	08E26204S01	CP., 0.33 $\mu$ F	C403	08E26782S01	CP., 0.1 $\mu$ F
C158	08E26204S01	CP., 0.33 $\mu$ F	C404	08E25370S01	CP., 2200pF
C159	08E26204S01	CP., 0.33 $\mu$ F	C405	08E24540S01	CP., 1 $\mu$ F
C160	08E26204S01	CP., 0.33 $\mu$ F	C406	08E24540S01	CP., 1 $\mu$ F
C163	08E25039S01	CP., 0.047 $\mu$ F	C407	08E25055S01	CP., 1000pF
C164	08E26204S01	CP., 0.33 $\mu$ F	C408	08E25033S01	CP., 0.01 $\mu$ F

Symbol No.	Part No.	Description	Symbol No.	Part No.	Description
C413	08E25042S01	CP., 220pF	C716	08E25055S01	CP., 1000pF
C414	08E25042S01	CP., 220pF	C717	08E25033S01	CP., 0.01μF
C415	08E25048S01	CP., 39pF	C718	08E25041S01	CP., 4700pF
C416	08E24540S01	CP., 1μF	C719	08E25041S01	CP., 4700pF
C417	08E25042S01	CP., 220pF	C720	08E25041S01	CP., 4700pF
C418	08E25046S01	CP., 15pF	C721	08E24648S01	CP., 0.1μF
C419	08E25046S01	CP., 15pF	C722	08E26780S01	CP., 150pF
C420	08E24648S01	CP., 0.1μF	C723	08E25033S01	CP., 0.01μF
C421	08E25033S01	CP., 0.01μF	C724	08E25055S01	CP., 1000pF
C422	08E26782S01	CP., 0.1μF	C725	08E25055S01	CP., 1000pF
C423	08E25393S01	CP., 1μF	C726	08E25033S01	CP., 0.01μF
CC500	23E24676S01	ELY., 1000μF / 25V	C727	08E25033S01	CP., 0.01μF
C501	08E25055S01	CP., 1000pF	C728	08E24648S01	CP., 0.1μF
CC501	23E26785S01	CP. ELY., 220μF / 16V	C729	08E25055S01	CP., 1000pF
C502	08E25034S01	CP., 560pF	C730	08E26204S01	CP., 0.33μF
CC502	23E25060S01	CP. ELY., 3.3μF / 50V	C731	08E25055S01	CP., 1000pF
C503	08E24648S01	CP., 0.1μF	C732	08E25041S01	CP., 4700pF
CC503	23E24668S01	ELY., 470μF / 35V	C733	08E25041S01	CP., 4700pF
C504	08E25055S01	CP., 1000pF	C734	08E24540S01	CP., 1μF
CC504	23E24673S01	CP. ELY., 100μF / 6.3V	C735	08E24648S01	CP., 0.1μF
C505	08E24648S01	CP., 0.1μF	C736	08E25041S01	CP., 4700pF
CC505	23E26788S01	ELY., 1000μF / 10V	C737	08E25041S01	CP., 4700pF
CC506	23E26788S01	ELY., 1000μF / 10V	C738	08E25041S01	CP., 4700pF
C507	08E24654S01	CP., 0.022μF	(All resistors are chip 1/16W±5% unless otherwise noted.)		
CC507	23E25066S01	CP. ELY., 10μF / 35V			
C508	08E25033S01	CP., 0.01μF	Resistors		
CC509	23E24671S01	ELY., 470μF / 16V	R100	06E26773S01	82 ohm
C510	08E24648S01	CP., 0.1μF	R101	06E25028S01	6.8K ohm
CC510	23E26787S01	CP. ELY., 33μF / 8V	R102	06E25006S01	1.8K ohm
CC511	23E26787S01	CP. ELY., 33μF / 8V	R103	06E25027S01	680 ohm
C512	08E25370S01	CP., 2200pF	R104	06E26773S01	82 ohm
C513	08E25033S01	CP., 0.01μF	R105	06E25018S01	39K ohm
C514	08E24648S01	CP., 0.1μF	R106	06E24998S01	100K ohm
C700	08E25055S01	CP., 1000pF	R107	06E25366S01	3.9K ohm
C701	08E25055S01	CP., 1000pF	R108	06E26202S01	560 ohm
C702	08E25055S01	CP., 1000pF	R109	06E25020S01	470 ohm
C703	08E25055S01	CP., 1000pF	R110	06E25009S01	220 ohm
C704	08E25055S01	CP., 1000pF	R111	06E25011S01	22K ohm
C705	08E25055S01	CP., 1000pF	R112	06E25016S01	3.3K ohm
C706	08E25055S01	CP., 1000pF	R113	06E26202S01	560 ohm
C707	08E25055S01	CP., 1000pF	R114	06E25020S01	470 ohm
C708	08E25055S01	CP., 1000pF	R116	06E24997S01	10K ohm
C709	08E25055S01	CP., 1000pF	R117	06E24996S01	1K ohm
C710	08E25055S01	CP., 1000pF	R118	06E25022S01	47K ohm
C711	08E25055S01	CP., 1000pF	R119	06E24989S01	2.2M ohm
C712	08E25055S01	CP., 1000pF	R120	06E25022S01	47K ohm
C713	08E25033S01	CP., 0.01μF	R121	06E25016S01	3.3K ohm
C714	08E25033S01	CP., 0.01μF	R122	06E26201S01	270 ohm
C715	08E25055S01	CP., 1000pF			

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Symbol No.	Part No.	Description	Symbol No.	Part No.	Description
R123	06E25026S01	560K ohm	R175	06E25009S01	220 ohm
R124	06E25015S01	330 ohm	R176	06E25010S01	2.2K ohm
R125	06E25015S01	330 ohm	R177	06E25006S01	1.8K ohm
R126	06E25015S01	330 ohm	R178	06E24999S01	1M ohm
R127	06E25005S01	150K ohm	R200	06E24996S01	1K ohm
R128	06E25028S01	6.8K ohm	R202	06E25014S01	27K ohm
R130	06E25027S01	680 ohm	R203	06E25014S01	27K ohm
R131	06E25027S01	680 ohm	R204	06E25014S01	27K ohm
R132	06E26202S01	560 ohm	R205	06E25011S01	22K ohm
R133	06E24997S01	10K ohm	R206	06E24997S01	10K ohm
R134	06E24990S01	3.3 ohm	R207	06E25013S01	2.7K ohm
R135	06E25021S01	4.7K ohm	R208	06E25004S01	15K ohm
R136	06E25011S01	22K ohm	R210	06E25015S01	330 ohm
R137	06E24997S01	10K ohm	R211	06E25010S01	2.2K ohm
R138	06E25000S01	1.2K ohm	R212	06E25021S01	4.7K ohm
R139	06E26202S01	560 ohm	R213	06E24990S01	3.3 ohm
R140	06E25016S01	3.3K ohm	R214	06E24990S01	3.3 ohm
R141	06E25016S01	3.3K ohm	R215	06E25010S01	2.2K ohm
R142	06E25030S01	75 ohm	R216	06E25013S01	2.7K ohm
R144	06E24998S01	100K ohm	R217	06E26201S01	270 ohm
R145	06E24998S01	100K ohm	R218	06E25013S01	2.7K ohm
R146	06E25010S01	2.2K ohm	R219	06E25004S01	15K ohm
R147	06E25010S01	2.2K ohm	R220	06E25001S01	12K ohm
R148	06E24999S01	1M ohm	R221	06E25017S01	33K ohm
R149	06E25016S01	3.3K ohm	R222	06E24998S01	100K ohm
R150	06E25011S01	22K ohm	R223	06E24999S01	1M ohm
R151	06E25011S01	22K ohm	R225	06E25020S01	470 ohm
R152	06E25011S01	22K ohm	R226	06E24997S01	10K ohm
R153	06E25011S01	22K ohm	R227	06E24997S01	10K ohm
R154	06E24997S01	10K ohm	R228	06E25010S01	2.2K ohm
R155	06E25022S01	47K ohm	R229	06E26772S01	680K ohm
R156	06E25011S01	22K ohm	R230	06E25022S01	47K ohm
R157	06E25011S01	22K ohm	R231	06E25007S01	180K ohm
R158	06E25011S01	22K ohm	R232	06E25004S01	15K ohm
R159	06E25011S01	22K ohm	R233	06E25365S01	390 ohm
R160	06E25021S01	4.7K ohm	R234	06E25022S01	47K ohm
R161	06E24999S01	1M ohm	R235	06E25021S01	4.7K ohm
R162	06E25011S01	22K ohm	R236	06E25365S01	390 ohm
R163	06E25011S01	22K ohm	R237	06E25020S01	470 ohm
R164	06E25011S01	22K ohm	R238	06E25015S01	330 ohm
R165	06E25011S01	22K ohm	R239	06E25020S01	470 ohm
R166	06E25011S01	22K ohm	R240	06E25015S01	330 ohm
R167	06E25011S01	22K ohm	R241	06E25013S01	2.7K ohm
R168	06E25011S01	22K ohm	R242	06E25017S01	33K ohm
R169	06E25011S01	22K ohm	R243	06E25022S01	47K ohm
R170	06E24996S01	1K ohm	R244	06E25020S01	470 ohm
R171	06E25030S01	75 ohm	R245	06E25015S01	330 ohm
R172	06E25010S01	2.2K ohm	R246	06E25020S01	470 ohm
R173	06E25022S01	47K ohm	R247	06E25015S01	330 ohm

Symbol No.	Part No.	Description	Symbol No.	Part No.	Description
R248	06E25020S01	470 ohm	R510	06E24996S01	1K ohm
R249	06E25015S01	330 ohm	R512	06E24618S01	100 ohm 1/4W
R254	06E26774S01	820 ohm	R513	06E25018S01	39K ohm
R400	06E25022S01	47K ohm	R514	06E25018S01	39K ohm
R401	06E25366S01	3.9K ohm	R515	06E24992S01	ERG1SJ471P, 470 ohm 1W
R402	06E24997S01	10K ohm	R517	06E25016S01	3.3K ohm
R403	06E25024S01	5.6K ohm	R518	06E25022S01	47K ohm
R404	06E25367S01	82K ohm	R519	06E24997S01	10K ohm
R405	06E25020S01	470 ohm	R520	06E25003S01	1.5K ohm
R406	06E25004S01	15K ohm	R521	06E25016S01	3.3K ohm.
R407	06E25366S01	3.9K ohm	R522	06E24997S01	10K ohm
R408	06E24998S01	100K ohm	R523	06E26775S01	470 ohm 1/10W
R409	06E24998S01	100K ohm	R524	06E24618S01	100 ohm 1/4W
R410	06E24997S01	10K ohm	R525	06E24618S01	100 ohm 1/4W
R411	06E24996S01	1K ohm	R526	06E25004S01	15K ohm
R413	06E24997S01	10K ohm	R527	06E25013S01	2.7K ohm
R414	06E24997S01	10K ohm	R529	06E24996S01	1K ohm
R415	06E25010S01	2.2K ohm	R532	06E25020S01	470 ohm
R416	06E25013S01	2.7K ohm	R534	06E24996S01	1K ohm
R417	06E25021S01	4.7K ohm	R535	06E24996S01	1K ohm
R418	06E25013S01	2.7K ohm	R543	06E25020S01	470 ohm
R419	06E25003S01	1.5K ohm	R700	06E25000S01	1.2K ohm
R420	06E24997S01	10K ohm	R701	06E25000S01	1.2K ohm
R421	06E24997S01	10K ohm	R702	06E25000S01	1.2K ohm
R422	06E25010S01	2.2K ohm	R703	06E25000S01	1.2K ohm
R423	06E25022S01	47K ohm	R704	06E24999S01	1M ohm
R424	06E26771S01	Block, CP. 2.2K ohm 1/16W X4	R705	06E25010S01	2.2K ohm
R425	06E24997S01	10K ohm	R706	06E24999S01	1M ohm
R426	06E24997S01	10K ohm	R707	06E25003S01	1.5K ohm
R427	06E24996S01	1K ohm	R708	06E25017S01	33K ohm
R428	06E24997S01	10K ohm	R709	06E24997S01	10K ohm
R429	06E25020S01	470 ohm	R710	06E25021S01	4.7K ohm
R430	06E25028S01	6.8K ohm	R711	06E25015S01	330 ohm
R437	06E24997S01	10K ohm	R712	06E24999S01	1M ohm
R438	06E24996S01	1K ohm	R713	06E24999S01	1M ohm
R439	06E25022S01	47K ohm	R714	06E24996S01	1K ohm
R440	06E25029S01	68K ohm	R715	06E24997S01	10K ohm
R441	06E25022S01	47K ohm	R716	06E25011S01	22K ohm
R444	06E24996S01	1K ohm	R717	06E24997S01	10K ohm
R445	06E25003S01	1.5K ohm	R718	06E24989S01	2.2M ohm
R500	06E24996S01	1K ohm	R719	06E24998S01	100K ohm
R502	06E25017S01	33K ohm	R720	06E24989S01	2.2M ohm
R503	06E25024S01	5.6K ohm	VR100	18E24984S01	Variable, CP. 5K ohm
R504	06E24991S01	ERG1SJ391P, 390 ohm 1W	VR500	18E24984S01	Variable, CP. 5K ohm
R505	06E25021S01	4.7K ohm	VR501	18E24266S01	Variable, CP. 1K ohm
R506	06E25016S01	3.3K ohm	VR700	18E24497S01	Variable, CP. 50K ohm
R507	06E25032S01	8.2K ohm			
R508	06E25032S01	8.2K ohm			
R509	06E24617S01	ERX12SJR20P, 0.2 ohm 1/2W			

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Symbol No.	Part No.	Description	Symbol No.	Part No.	Description
<b>Miscellaneous</b>					
DIN200	09E24983S01	DIN Jack, RGB INPUT			
ET201	30E26186S01	Assy., 16P Connector (To Monitor Unit)			
ET500	09E24264S01	Power Supply Connector			
JK100	09E24259S01	RCA Jack, NAVIGATION INPUT (VIDEO)			
JK101	09E24258S01	RCA Jack, NAVIGATION INPUT (AUDIO-L(MONO))			
JK102	09E24257S01	RCA Jack, NAVIGATION INPUT (AUDIO-R)			
JK103	09E24259S01	RCA Jack, VIDEO INPUT/OUTPUT (VIDEO)			
JK104	09E24258S01	RCA Jack, VIDEO INPUT/OUTPUT (AUDIO-L)			
JK105	09E24257S01	RCA Jack, VIDEO INPUT/OUTPUT (AUDIO-R)			
JK700	09E24256S01	Jack, ANTENNA INPUT 1			
JK701	09E24256S01	Jack, ANTENNA INPUT 2			
JK702	09E24256S01	Jack, ANTENNA INPUT 3			
JK703	09E24256S01	Jack, ANTENNA INPUT 4			



# Cabinet Assembly Parts List

NOTE: Parts without part number are not supplied.

Symbol No.	Index	Part No.	Description	Symbol No.	Index	Part No.	Description
4		03E23444S01	Screw, W/Washer				
5		03E23446S01	Screw, Pan				
6		77E26791S01	Tuner Unit, TEAZ2-005A (FE100)				
7		03E26205S01	Screw, Pan (M3X8)				

## Exploded View (Cabinet)

